East Midlands Gateway
Phase 2 (EMG2)

Document DCO 6.6A/MCO 6.6A (Part 7)

ENVIRONMENTAL STATEMENT

Technical Appendices

Appendix 6A

Transport Assessment

~~October 2025~~April 2026

06

The East Midlands Gateway Phase 2 and Highway Order 202X and The East Midlands Gateway Rail Freight and Highway (Amendment) Order 202X

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The East Midlands Gateway Phase 2 and Highway Order 202X and The East Midlands Gateway Rail Freight and Highway (Amendment) Order 202X

APPENDIX 6.6A TRANSPORT ASSESSMENT (PART 7) (DOCUMENT DCO 6.6A/MCO 6.6A)

Version	Date	Status of Version
0	October 2025	Submission
1	April 2026	Deadline 1

APPENDIX 9 – A453/Walton Hill Signal Junction Turning Count Results

Road Data Services Ltd

East Midlands Gateway
Thursday 3rd November 2022
Junction: 1
Approach: Northern Arm

	Left to A453									Right to Walton Hill								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	1	1	66	9	6	0	1	84	86.6	0	2	27	4	1	0	0	34	33.3
07:15 - 07:30	0	2	66	9	1	0	1	79	79.3	0	0	37	7	1	1	0	46	47.8
07:30 - 07:45	0	1	107	8	2	2	4	124	131.0	0	1	43	12	7	2	0	65	70.5
07:45 - 08:00	0	0	97	12	5	2	3	119	127.1	0	0	48	6	2	1	0	57	59.3
Hourly Total	**1**	**4**	**336**	**38**	**14**	**4**	**9**	**406**	**424.0**	**0**	**3**	**155**	**29**	**11**	**4**	**0**	**202**	**210.9**
08:00 - 08:15	0	0	90	16	3	2	2	113	119.1	0	1	55	13	3	2	0	74	77.5
08:15 - 08:30	0	0	92	7	11	8	1	119	135.9	0	0	51	11	1	5	0	68	75.0
08:30 - 08:45	0	0	86	9	7	3	3	108	118.4	0	1	50	7	2	1	0	61	62.7
08:45 - 09:00	0	1	65	10	1	1	3	81	85.2	0	4	33	5	5	4	0	51	56.3
Hourly Total	**0**	**1**	**333**	**42**	**22**	**14**	**9**	**421**	**458.6**	**0**	**6**	**189**	**36**	**11**	**12**	**0**	**254**	**271.5**
09:00 - 09:15	1	0	26	6	4	1	4	42	48.5	0	0	37	8	4	3	0	52	57.9
09:15 - 09:30	0	1	33	5	2	1	1	43	45.7	2	0	28	7	2	4	0	43	47.6
09:30 - 09:45	0	0	22	3	2	3	3	33	40.9	0	0	28	9	0	1	0	38	39.3
09:45 - 10:00	0	0	19	2	2	0	3	26	30.0	0	0	25	8	4	1	0	38	41.3
Hourly Total	**1**	**1**	**100**	**16**	**10**	**5**	**11**	**144**	**165.1**	**2**	**0**	**118**	**32**	**10**	**9**	**0**	**171**	**186.1**
TOTAL	**2**	**6**	**769**	**96**	**46**	**23**	**29**	**971**	**1047.7**	**2**	**9**	**462**	**97**	**32**	**25**	**0**	**627**	**668.5**
16:00 - 16:15	0	2	42	8	2	2	2	58	62.4	0	0	62	15	5	2	0	84	89.1
16:15 - 16:30	0	2	39	11	2	1	1	56	58.1	1	1	59	12	0	0	0	73	71.6
16:30 - 16:45	0	0	35	5	2	2	1	45	49.6	0	0	68	10	0	1	0	79	80.3
16:45 - 17:00	1	3	37	5	1	1	2	50	51.2	0	1	41	8	0	2	1	53	56.0
Hourly Total	**1**	**7**	**153**	**29**	**7**	**6**	**6**	**209**	**221.3**	**1**	**2**	**230**	**45**	**5**	**5**	**1**	**289**	**297.0**
17:00 - 17:15	0	0	51	9	1	2	2	65	70.1	0	0	81	4	1	2	0	88	91.1
17:15 - 17:30	0	0	43	10	0	1	1	55	57.3	0	0	67	5	0	1	0	73	74.3
17:30 - 17:45	0	0	47	4	0	0	0	51	51.0	1	2	51	9	0	1	0	64	63.3
17:45 - 18:00	1	0	43	1	0	0	3	48	50.2	0	0	56	2	1	0	0	59	59.5
Hourly Total	**1**	**0**	**184**	**24**	**1**	**3**	**6**	**219**	**228.6**	**1**	**2**	**255**	**20**	**2**	**4**	**0**	**284**	**288.2**
18:00 - 18:15	0	0	49	1	0	0	2	52	54.0	0	0	53	4	0	0	0	57	57.0
18:15 - 18:30	0	1	49	9	0	1	2	62	64.7	0	0	45	1	0	0	0	46	46.0
18:30 - 18:45	1	2	64	4	1	1	2	75	76.8	0	0	17	2	2	0	0	21	22.0
18:45 - 19:00	0	0	52	4	1	1	2	60	63.8	0	0	39	3	1	0	0	43	43.5
Hourly Total	**1**	**3**	**214**	**18**	**2**	**3**	**8**	**249**	**259.3**	**0**	**0**	**154**	**10**	**3**	**0**	**0**	**167**	**168.5**
TOTAL	**3**	**10**	**551**	**71**	**10**	**12**	**20**	**677**	**709.2**	**2**	**4**	**639**	**75**	**10**	**9**	**1**	**740**	**753.7**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Gateway
Thursday 3rd November 2022
Junction: 1
Approach: A453

	Ahead to Walton Hill									Right to Northern Arm									
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	20	4	1	3	0	28	32.4	0	0	19	5	1	0	3	28	31.5
07:15 - 07:30	0	0	25	7	1	3	0	36	40.4	0	0	21	7	4	1	0	33	36.3
07:30 - 07:45	0	0	23	9	4	3	1	40	46.9	0	0	27	5	1	1	2	36	39.8
07:45 - 08:00	0	0	24	8	2	4	0	38	44.2	0	0	35	10	2	3	2	52	58.9
Hourly Total	**0**	**0**	**92**	**28**	**8**	**13**	**1**	**142**	**163.9**	**0**	**0**	**102**	**27**	**8**	**5**	**7**	**149**	**166.5**
08:00 - 08:15	0	0	27	3	1	3	0	34	38.4	0	1	29	14	3	2	3	52	58.5
08:15 - 08:30	0	0	35	4	2	8	0	49	60.4	0	0	34	10	2	3	1	50	55.9
08:30 - 08:45	0	0	38	5	1	4	0	48	53.7	0	1	25	6	3	1	1	37	40.2
08:45 - 09:00	0	0	19	5	1	4	0	29	34.7	0	0	30	10	1	3	2	46	52.4
Hourly Total	**0**	**0**	**119**	**17**	**5**	**19**	**0**	**160**	**187.2**	**0**	**2**	**118**	**40**	**9**	**9**	**7**	**185**	**207.0**
09:00 - 09:15	0	0	28	7	1	3	0	39	43.4	0	0	19	5	5	1	1	31	35.8
09:15 - 09:30	0	0	13	5	4	1	0	23	26.3	0	0	15	5	2	2	2	26	31.6
09:30 - 09:45	0	0	17	3	1	4	0	25	30.7	0	0	25	6	4	0	1	36	39.0
09:45 - 10:00	0	0	10	6	1	6	1	24	33.3	0	2	21	6	2	1	1	33	35.1
Hourly Total	**0**	**0**	**68**	**21**	**7**	**14**	**1**	**111**	**133.7**	**0**	**2**	**80**	**22**	**13**	**4**	**5**	**126**	**141.5**
TOTAL	**0**	**0**	**279**	**66**	**20**	**46**	**2**	**413**	**484.8**	**0**	**4**	**300**	**89**	**30**	**18**	**19**	**460**	**515.0**
16:00 - 16:15	0	1	63	3	3	5	0	75	82.4	0	0	62	4	0	2	2	70	74.6
16:15 - 16:30	0	0	60	7	2	3	1	73	78.9	0	0	57	9	0	2	3	71	76.6
16:30 - 16:45	0	0	92	13	2	3	0	110	114.9	1	0	61	5	1	1	1	70	72.0
16:45 - 17:00	0	0	62	8	0	0	0	70	70.0	0	1	65	3	0	0	2	71	72.4
Hourly Total	**0**	**1**	**277**	**31**	**7**	**11**	**1**	**328**	**346.2**	**1**	**1**	**245**	**21**	**1**	**5**	**8**	**282**	**295.6**
17:00 - 17:15	0	0	78	3	2	1	0	84	86.3	0	2	85	7	0	0	1	95	94.8
17:15 - 17:30	0	0	56	5	0	1	1	63	65.3	0	0	62	8	2	0	2	74	77.0
17:30 - 17:45	0	0	72	0	1	3	0	76	80.4	1	1	78	5	0	0	1	86	85.6
17:45 - 18:00	0	0	53	3	0	0	0	56	56.0	0	0	74	3	0	0	3	80	83.0
Hourly Total	**0**	**0**	**259**	**11**	**3**	**5**	**1**	**279**	**288.0**	**1**	**3**	**299**	**23**	**2**	**0**	**7**	**335**	**340.4**
18:00 - 18:15	0	0	49	2	0	0	0	51	51.0	0	1	37	1	0	1	1	41	42.7
18:15 - 18:30	0	2	36	0	1	0	0	39	38.3	0	2	38	6	0	1	2	49	51.1
18:30 - 18:45	0	2	30	1	0	0	1	34	33.8	0	0	27	4	1	0	0	32	32.5
18:45 - 19:00	0	0	29	1	2	0	0	32	33.0	0	0	26	2	0	0	0	28	28.0
Hourly Total	**0**	**4**	**144**	**4**	**3**	**0**	**1**	**156**	**156.1**	**0**	**3**	**128**	**13**	**1**	**2**	**3**	**150**	**154.3**
TOTAL	**0**	**5**	**680**	**46**	**13**	**16**	**3**	**763**	**790.3**	**2**	**7**	**672**	**57**	**4**	**7**	**18**	**767**	**790.3**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Gateway
Thursday 3rd November 2022
Junction: 1
Approach: Walton Hill

	Left to Northern Arm									Ahead to A453								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	1	0	33	12	2	0	0	48	48.2	0	0	45	6	1	6	1	59	68.3
07:15 - 07:30	1	0	45	12	1	1	0	60	61.0	0	1	64	8	2	5	0	80	86.9
07:30 - 07:45	0	0	49	10	4	1	0	64	67.3	0	0	81	8	3	9	0	101	114.2
07:45 - 08:00	0	0	60	20	1	3	0	84	88.4	0	0	90	6	1	4	0	101	106.7
Hourly Total	**2**	**0**	**187**	**54**	**8**	**5**	**0**	**256**	**264.9**	**0**	**1**	**280**	**28**	**7**	**24**	**1**	**341**	**376.1**
08:00 - 08:15	0	0	54	8	2	0	0	64	65.0	0	0	70	7	2	5	0	84	91.5
08:15 - 08:30	0	0	74	9	3	1	0	87	89.8	0	0	62	16	5	3	1	87	94.4
08:30 - 08:45	0	0	58	4	3	2	1	68	73.1	0	0	57	3	3	6	0	69	78.3
08:45 - 09:00	0	0	49	3	3	3	0	58	63.4	0	0	66	4	4	6	0	80	89.8
Hourly Total	**0**	**0**	**235**	**24**	**11**	**6**	**1**	**277**	**291.3**	**0**	**0**	**255**	**30**	**14**	**20**	**1**	**320**	**354.0**
09:00 - 09:15	0	0	28	3	6	3	0	40	46.9	0	0	47	10	4	6	0	67	76.8
09:15 - 09:30	0	0	36	3	3	2	0	44	48.1	0	0	31	6	3	2	2	44	50.1
09:30 - 09:45	0	1	30	5	5	0	0	41	42.9	0	0	25	6	1	2	0	34	37.1
09:45 - 10:00	0	1	38	5	1	3	0	48	51.8	0	0	31	5	2	3	0	41	45.9
Hourly Total	**0**	**2**	**132**	**16**	**15**	**8**	**0**	**173**	**189.7**	**0**	**0**	**134**	**27**	**10**	**13**	**2**	**186**	**209.9**
TOTAL	**2**	**2**	**554**	**94**	**34**	**19**	**1**	**706**	**745.9**	**0**	**1**	**669**	**85**	**31**	**57**	**4**	**847**	**940.0**
16:00 - 16:15	0	0	37	9	0	2	0	48	50.6	0	0	33	6	1	1	0	41	42.8
16:15 - 16:30	0	1	47	6	0	1	0	55	55.7	0	0	25	12	3	0	0	40	41.5
16:30 - 16:45	0	2	36	7	0	0	0	45	43.8	0	0	23	11	0	0	0	34	34.0
16:45 - 17:00	0	0	57	7	0	1	0	65	66.3	0	0	30	5	0	0	1	36	37.0
Hourly Total	**0**	**3**	**177**	**29**	**0**	**4**	**0**	**213**	**216.4**	**0**	**0**	**111**	**34**	**4**	**1**	**1**	**151**	**155.3**
17:00 - 17:15	0	1	49	1	1	0	0	52	51.9	0	0	41	3	0	0	0	44	44.0
17:15 - 17:30	0	0	51	3	1	1	0	56	57.8	0	0	35	1	0	0	0	36	36.0
17:30 - 17:45	0	0	50	6	2	0	0	58	59.0	0	1	54	3	0	1	1	60	61.7
17:45 - 18:00	0	1	45	6	2	0	0	54	54.4	0	0	41	2	1	0	0	44	44.5
Hourly Total	**0**	**2**	**195**	**16**	**6**	**1**	**0**	**220**	**223.1**	**0**	**1**	**171**	**9**	**1**	**1**	**1**	**184**	**186.2**
18:00 - 18:15	0	0	36	2	1	0	0	39	39.5	0	0	29	2	2	0	1	34	36.0
18:15 - 18:30	0	0	32	4	0	1	0	37	38.3	0	0	23	0	0	0	0	23	23.0
18:30 - 18:45	0	1	27	3	1	0	0	32	31.9	0	0	39	2	1	1	0	43	44.8
18:45 - 19:00	0	0	28	1	0	0	0	29	29.0	0	0	39	4	0	0	0	43	43.0
Hourly Total	**0**	**1**	**123**	**10**	**2**	**1**	**0**	**137**	**138.7**	**0**	**0**	**130**	**8**	**3**	**1**	**1**	**143**	**146.8**
TOTAL	**0**	**6**	**495**	**55**	**8**	**6**	**0**	**570**	**578.2**	**0**	**1**	**412**	**51**	**8**	**3**	**3**	**478**	**488.3**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

APPENDIX 10 – M1 Junction 23 Turning Count Results

Road Data Services Ltd

East Midlands Gateway
Wednesday 2nd November 2022
Junction: 6
Approach: M1 J23 Slip Road North

	To A512									To M1 J23 Slip Road (S)									To Ashby Road East								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	41	28	1	1	2	73	76.8	0	0	0	0	0	0	0	0	0.0	0	0	26	9	0	4	0	39	44.2
07:15 - 07:30	0	0	59	16	6	2	0	83	88.6	0	0	0	0	0	0	0	0	0.0	0	0	27	22	2	1	0	52	54.3
07:30 - 07:45	0	0	115	19	2	0	0	136	137.0	0	0	0	0	0	0	0	0	0.0	0	0	33	17	7	0	0	57	60.5
07:45 - 08:00	0	1	189	31	6	1	0	228	231.7	0	0	0	0	0	0	0	0	0.0	0	0	68	18	9	4	0	99	108.7
Hourly Tota	**0**	**1**	**404**	**94**	**15**	**4**	**2**	**520**	**534.1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**154**	**66**	**18**	**9**	**0**	**247**	**267.7**
08:00 - 08:15	0	0	153	39	8	3	0	203	210.9	0	0	0	0	0	0	0	0	0.0	0	0	53	24	6	3	0	86	92.9
08:15 - 08:30	0	1	170	23	2	5	0	201	207.9	0	0	0	0	0	0	0	0	0.0	0	0	58	18	7	8	0	91	104.9
08:30 - 08:45	0	0	165	24	9	8	0	206	220.9	0	0	0	0	0	0	0	0	0.0	0	0	39	16	9	2	0	66	73.1
08:45 - 09:00	0	0	131	17	0	3	0	151	154.9	0	0	0	0	0	0	0	0	0.0	0	0	61	17	1	4	1	84	90.7
Hourly Tota	**0**	**1**	**619**	**103**	**19**	**19**	**0**	**761**	**794.6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**211**	**75**	**23**	**17**	**1**	**327**	**361.6**
09:00 - 09:15	0	0	92	17	2	6	2	119	129.8	0	0	0	0	0	0	0	0	0.0	0	0	42	10	4	5	0	61	69.5
09:15 - 09:30	0	0	84	13	7	4	3	111	122.7	0	0	0	0	0	0	0	0	0.0	0	0	46	16	2	7	0	71	81.1
09:30 - 09:45	0	0	83	16	5	1	0	105	108.8	0	0	0	0	0	0	0	0	0.0	0	0	25	12	2	7	0	46	56.1
09:45 - 10:00	0	0	74	20	5	3	1	103	110.4	0	0	0	0	0	0	0	0	0.0	0	0	25	4	4	4	0	37	44.2
Hourly Tota	**0**	**0**	**333**	**66**	**19**	**14**	**6**	**438**	**471.7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**138**	**42**	**12**	**23**	**0**	**215**	**250.9**
TOTAL	**0**	**2**	**1356**	**263**	**53**	**37**	**8**	**1719**	**1800.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**503**	**183**	**53**	**49**	**1**	**789**	**880.2**
16:00 - 16:15	0	0	58	11	3	3	1	76	82.4	0	0	0	0	0	0	0	0	0.0	0	0	28	8	1	3	1	41	46.4
16:15 - 16:30	0	0	83	17	2	0	0	102	103.0	0	0	0	0	0	0	0	0	0.0	0	0	30	17	2	5	0	54	61.5
16:30 - 16:45	0	1	88	20	3	1	0	113	115.2	0	0	0	0	0	0	0	0	0.0	0	0	44	12	5	5	0	66	75.0
16:45 - 17:00	0	1	100	11	2	1	1	116	118.7	0	0	0	0	0	0	0	0	0.0	0	1	36	10	2	4	0	53	58.6
Hourly Tota	**0**	**2**	**329**	**59**	**10**	**5**	**2**	**407**	**419.3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**138**	**47**	**10**	**17**	**1**	**214**	**241.5**
17:00 - 17:15	0	0	91	14	0	2	0	107	109.6	0	0	0	0	0	0	0	0	0.0	0	0	36	9	0	1	0	46	47.3
17:15 - 17:30	0	0	107	12	1	0	0	120	120.5	0	0	0	0	0	0	0	0	0.0	0	0	37	6	2	7	0	52	62.1
17:30 - 17:45	0	0	70	8	1	1	0	80	81.8	0	0	0	0	0	0	0	0	0.0	0	0	38	5	0	3	0	46	49.9
17:45 - 18:00	0	0	83	9	0	2	0	94	96.6	0	0	0	0	0	0	0	0	0.0	0	0	22	2	1	2	0	27	30.1
Hourly Tota	**0**	**0**	**351**	**43**	**2**	**5**	**0**	**401**	**408.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**133**	**22**	**3**	**13**	**0**	**171**	**189.4**
18:00 - 18:15	0	0	71	12	1	1	0	85	86.8	0	0	0	0	0	0	0	0	0.0	0	0	33	5	2	1	0	41	43.3
18:15 - 18:30	0	0	99	6	1	0	1	107	108.5	0	0	0	0	0	0	0	0	0.0	0	0	59	1	2	3	0	65	69.9
18:30 - 18:45	0	0	65	7	0	1	0	73	74.3	0	0	0	0	0	0	0	0	0.0	0	0	41	6	3	4	0	54	60.7
18:45 - 19:00	0	0	84	6	2	0	1	93	95.0	0	0	0	0	0	0	0	0	0.0	0	0	34	11	1	3	0	49	53.4
Hourly Tota	**0**	**0**	**319**	**31**	**4**	**2**	**2**	**358**	**364.6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**167**	**23**	**8**	**11**	**0**	**209**	**227.3**
TOTAL	**0**	**2**	**999**	**133**	**16**	**12**	**4**	**1166**	**1192.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**438**	**92**	**21**	**41**	**1**	**594**	**658.2**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Gateway
Wednesday 2nd November 2022
Junction: 6
Approach: A512

	To M1 J23 Slip Road (S)									To Ashby Road East									To M1 J23 Slip Road (N)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	42	7	4	1	0	54	57.3	0	1	39	11	3	0	1	55	56.9	0	0	90	20	2	4	0	116	122.2
07:15 - 07:30	0	0	28	9	2	0	0	39	40.0	0	1	52	14	3	1	0	71	73.2	0	0	106	24	3	4	0	137	143.7
07:30 - 07:45	0	0	30	5	2	1	0	38	40.3	0	0	65	8	4	4	1	82	90.2	0	1	121	13	4	1	0	140	142.7
07:45 - 08:00	0	0	21	7	1	2	1	32	36.1	0	0	79	14	2	1	2	98	102.3	0	0	100	14	3	5	0	122	130.0
Hourly Tota	0	0	121	28	9	4	1	163	173.7	0	2	235	47	12	6	4	306	322.6	0	1	417	71	12	14	0	515	538.6
08:00 - 08:15	0	0	35	3	2	3	0	43	47.9	0	0	101	12	5	0	0	118	120.5	0	1	82	10	3	4	0	100	106.1
08:15 - 08:30	0	0	22	4	4	1	0	31	34.3	0	0	51	8	0	0	1	60	61.0	0	0	90	12	3	2	0	107	111.1
08:30 - 08:45	0	0	19	7	2	6	3	37	48.8	0	0	72	14	2	4	0	92	98.2	0	0	81	7	1	3	1	93	98.4
08:45 - 09:00	0	0	19	7	3	3	1	33	39.4	0	0	59	18	0	0	2	79	81.0	0	1	70	9	2	3	0	85	89.3
Hourly Tota	0	0	95	21	11	13	4	144	170.4	0	0	283	52	7	4	3	349	360.7	0	2	323	38	9	12	1	385	404.9
09:00 - 09:15	0	0	19	12	3	2	1	37	42.1	0	0	45	20	3	2	1	71	76.1	0	1	76	15	3	1	0	96	98.2
09:15 - 09:30	0	0	19	2	6	2	0	29	34.6	0	0	45	14	3	0	2	64	67.5	0	0	57	11	2	5	0	75	82.5
09:30 - 09:45	0	0	28	7	7	4	2	48	58.7	0	0	42	14	1	3	0	60	64.4	0	0	64	12	4	5	0	85	93.5
09:45 - 10:00	0	0	22	9	3	2	0	36	40.1	0	0	46	13	4	1	1	65	69.3	0	1	53	10	6	2	0	72	77.0
Hourly Tota	0	0	88	30	19	10	3	150	175.5	0	0	178	61	11	6	4	260	277.3	0	2	250	48	15	13	0	328	351.2
TOTAL	0	0	304	79	39	27	8	457	519.6	0	2	696	160	30	16	11	915	960.6	0	5	990	157	36	39	1	1228	1294.7
16:00 - 16:15	0	0	102	14	2	1	0	119	121.3	0	0	127	16	2	1	2	148	152.3	0	0	102	16	3	0	3	124	128.5
16:15 - 16:30	0	1	99	12	0	1	1	114	115.7	0	0	113	10	2	2	2	129	134.6	0	0	121	11	4	2	1	139	144.6
16:30 - 16:45	0	0	79	16	1	3	0	99	103.4	1	1	121	14	1	1	0	139	139.4	0	0	120	22	1	1	0	144	145.8
16:45 - 17:00	0	1	95	12	0	0	0	108	107.4	0	2	134	15	1	2	0	154	155.9	0	0	126	18	2	2	2	150	155.6
Hourly Tota	0	2	375	54	3	5	1	440	447.8	1	3	495	55	6	6	4	570	582.2	0	0	469	67	10	5	6	557	574.5
17:00 - 17:15	0	0	90	11	0	0	1	102	103.0	0	0	162	13	0	1	3	179	183.3	0	0	112	16	1	2	1	132	136.1
17:15 - 17:30	0	0	87	8	1	1	1	98	100.8	0	1	92	10	0	0	0	103	102.4	0	0	135	14	1	3	1	154	159.4
17:30 - 17:45	0	0	78	4	1	0	0	83	83.5	0	0	124	13	1	3	1	142	147.4	0	0	91	4	1	0	0	96	96.5
17:45 - 18:00	0	0	53	10	0	0	0	63	63.0	0	0	72	9	0	0	3	84	87.0	0	0	91	6	1	0	0	98	98.5
Hourly Tota	0	0	308	33	2	1	2	346	350.3	0	1	450	45	1	4	7	508	520.1	0	0	429	40	4	5	2	480	490.5
18:00 - 18:15	0	0	52	3	0	0	0	55	55.0	0	7	83	17	1	3	2	113	115.2	0	1	62	6	0	0	0	69	68.4
18:15 - 18:30	0	0	38	4	0	1	3	46	50.3	0	0	104	15	0	0	2	121	123.0	0	1	48	4	3	0	0	56	56.9
18:30 - 18:45	0	0	40	2	2	0	0	44	45.0	0	0	61	9	0	0	1	71	72.0	0	1	50	6	0	1	0	58	58.7
18:45 - 19:00	0	0	24	2	0	0	1	27	28.0	0	0	56	7	0	1	1	65	67.3	0	0	47	5	1	1	1	55	57.8
Hourly Tota	0	0	154	11	2	1	4	172	178.3	0	7	304	48	1	4	6	370	377.5	0	3	207	21	4	2	1	238	241.8
TOTAL	0	2	837	98	7	7	7	958	976.4	1	11	1249	148	8	14	17	1448	1479.8	0	3	1105	128	18	12	9	1275	1306.8

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Gateway
Wednesday 2nd November 2022
Junction: 6
Approach: M1 J23 Slip Road South

	To Ashby Road East									To M1 J23 Slip Road (N)									To A512								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	15	2	2	4	0	23	29.2	0	0	0	0	0	0	0	0	0.0	0	0	30	9	3	0	0	42	43.5
07:15 - 07:30	0	1	24	7	1	0	0	33	32.9	0	0	0	0	0	0	0	0	0.0	0	0	49	6	6	0	0	61	64.0
07:30 - 07:45	0	0	34	8	2	2	0	46	49.6	0	0	0	0	0	0	0	0	0.0	0	0	60	10	6	3	0	79	85.9
07:45 - 08:00	0	0	37	7	1	3	0	48	52.4	0	0	0	0	0	0	0	0	0.0	0	1	74	8	2	2	0	87	90.0
Hourly Tota	**0**	**1**	**110**	**24**	**6**	**9**	**0**	**150**	**164.1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**213**	**33**	**17**	**5**	**0**	**269**	**283.4**
08:00 - 08:15	0	0	33	9	5	4	0	51	58.7	0	0	0	0	0	0	0	0	0.0	0	0	92	13	2	2	0	109	112.6
08:15 - 08:30	0	0	21	11	1	4	0	37	42.7	0	0	0	0	0	0	0	0	0.0	0	0	109	16	2	1	0	128	130.3
08:30 - 08:45	0	0	17	7	1	4	0	29	34.7	0	0	0	0	0	0	0	0	0.0	0	0	105	6	2	2	1	116	120.6
08:45 - 09:00	0	0	19	5	1	2	0	27	30.1	0	0	0	0	0	0	0	0	0.0	0	0	80	8	3	1	0	92	94.8
Hourly Tota	**0**	**0**	**90**	**32**	**8**	**14**	**0**	**144**	**166.2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**386**	**43**	**9**	**6**	**1**	**445**	**458.3**
09:00 - 09:15	0	0	16	9	3	3	0	31	36.4	0	0	0	0	0	0	0	0	0.0	0	0	76	5	4	0	0	85	87.0
09:15 - 09:30	0	0	13	10	2	2	0	27	30.6	0	0	0	0	0	0	0	0	0.0	0	0	55	7	3	1	0	66	68.8
09:30 - 09:45	0	0	14	3	1	1	1	20	22.8	0	0	0	0	0	0	0	0	0.0	0	0	36	6	4	3	1	50	56.9
09:45 - 10:00	0	0	18	5	0	2	0	25	27.6	0	0	0	0	0	0	0	0	0.0	0	0	34	8	2	4	0	48	54.2
Hourly Tota	**0**	**0**	**61**	**27**	**6**	**8**	**1**	**103**	**117.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**201**	**26**	**13**	**8**	**1**	**249**	**266.9**
TOTAL	**0**	**1**	**261**	**83**	**20**	**31**	**1**	**397**	**447.7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**800**	**102**	**39**	**19**	**2**	**963**	**1008.6**
16:00 - 16:15	0	0	12	5	2	4	0	23	29.2	0	0	0	0	0	0	0	0	0.0	0	0	28	2	2	0	1	33	35.0
16:15 - 16:30	0	0	34	7	2	4	0	47	53.2	0	0	0	0	0	0	0	0	0.0	0	0	28	10	2	1	0	41	43.3
16:30 - 16:45	0	0	32	7	3	2	0	44	48.1	0	0	0	0	0	0	0	0	0.0	0	0	47	5	0	4	0	56	61.2
16:45 - 17:00	0	0	22	3	2	1	0	28	30.3	0	0	0	0	0	0	0	0	0.0	0	0	28	3	1	0	0	32	32.5
Hourly Tota	**0**	**0**	**100**	**22**	**9**	**11**	**0**	**142**	**160.8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**131**	**20**	**5**	**5**	**1**	**162**	**172.0**
17:00 - 17:15	0	0	17	3	1	6	0	27	35.3	0	0	0	0	0	0	0	0	0.0	0	0	47	3	1	0	1	52	53.5
17:15 - 17:30	0	0	38	4	3	5	0	50	58.0	0	0	0	0	0	0	0	0	0.0	0	0	50	4	1	1	0	56	57.8
17:30 - 17:45	0	0	30	4	1	2	0	37	40.1	0	0	0	0	0	0	0	0	0.0	0	0	44	2	2	1	0	49	51.3
17:45 - 18:00	0	0	24	2	3	2	0	31	35.1	0	0	0	0	0	0	0	0	0.0	0	0	32	3	2	0	0	37	38.0
Hourly Tota	**0**	**0**	**109**	**13**	**8**	**15**	**0**	**145**	**168.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**173**	**12**	**6**	**2**	**1**	**194**	**200.6**
18:00 - 18:15	0	0	20	6	2	2	0	30	33.6	0	0	0	0	0	0	0	0	0.0	0	0	41	0	1	1	0	43	44.8
18:15 - 18:30	0	0	31	3	2	1	0	37	39.3	0	0	0	0	0	0	0	0	0.0	0	0	34	3	0	0	0	37	37.0
18:30 - 18:45	0	0	29	3	1	3	0	36	40.4	0	0	0	0	0	0	0	0	0.0	0	0	23	4	0	0	0	27	27.0
18:45 - 19:00	0	0	24	0	1	1	0	26	27.8	0	0	0	0	0	0	0	0	0.0	0	0	22	3	1	0	0	26	26.5
Hourly Tota	**0**	**0**	**104**	**12**	**6**	**7**	**0**	**129**	**141.1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**120**	**10**	**2**	**1**	**0**	**133**	**135.3**
TOTAL	**0**	**0**	**313**	**47**	**23**	**33**	**0**	**416**	**470.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**424**	**42**	**13**	**8**	**2**	**489**	**507.9**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Gateway
Wednesday 2nd November 2022
Junction: 6
Approach: Ashby Road East

	To M1 J23 Slip Road (N)									To A512									To M1 J23 Slip Road (S)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	1	58	23	2	8	0	92	102.8	0	0	74	13	1	1	1	90	92.8	0	0	38	11	1	2	0	52	55.1
07:15 - 07:30	0	0	55	13	2	10	0	80	94.0	0	1	75	21	2	2	1	102	106.0	0	0	28	7	1	3	0	39	43.4
07:30 - 07:45	0	0	70	17	2	7	0	96	106.1	0	1	135	17	5	1	1	160	164.2	0	0	27	9	0	1	0	37	38.3
07:45 - 08:00	0	0	52	9	1	3	0	65	69.4	0	1	165	15	4	1	2	188	192.7	0	0	20	9	4	3	0	36	41.9
Hourly Tota	**0**	**1**	**235**	**62**	**7**	**28**	**0**	**333**	**372.3**	**0**	**3**	**449**	**66**	**12**	**5**	**5**	**540**	**555.7**	**0**	**0**	**113**	**36**	**6**	**9**	**0**	**164**	**178.7**
08:00 - 08:15	0	0	44	10	6	1	0	61	65.3	0	0	137	15	0	0	4	156	160.0	0	0	21	2	2	1	0	26	28.3
08:15 - 08:30	0	0	30	10	3	1	0	44	46.8	0	2	162	21	6	6	2	199	210.6	0	0	16	4	0	1	0	21	22.3
08:30 - 08:45	0	0	31	7	2	1	0	41	43.3	0	0	149	13	5	8	1	176	189.9	0	0	15	3	2	4	0	24	30.2
08:45 - 09:00	0	0	39	8	2	2	0	51	54.6	0	0	114	15	6	1	1	137	142.3	0	1	19	1	4	4	0	29	35.6
Hourly Tota	**0**	**0**	**144**	**35**	**13**	**5**	**0**	**197**	**210.0**	**0**	**2**	**562**	**64**	**17**	**15**	**8**	**668**	**702.8**	**0**	**1**	**71**	**10**	**8**	**10**	**0**	**100**	**116.4**
09:00 - 09:15	0	0	27	6	3	6	0	42	51.3	0	1	102	15	5	2	0	125	129.5	0	0	15	1	2	2	0	20	23.6
09:15 - 09:30	0	1	15	6	1	5	1	29	36.4	1	0	88	13	8	3	1	114	122.1	0	0	10	5	1	2	0	18	21.1
09:30 - 09:45	0	0	30	6	2	4	0	42	48.2	0	1	95	11	6	1	1	115	119.7	0	0	12	3	1	4	0	20	25.7
09:45 - 10:00	0	0	7	8	5	2	0	22	27.1	0	1	109	16	0	1	1	128	129.7	0	0	10	6	2	6	0	24	32.8
Hourly Tota	**0**	**1**	**79**	**26**	**11**	**17**	**1**	**135**	**163.0**	**1**	**3**	**394**	**55**	**19**	**7**	**3**	**482**	**501.0**	**0**	**0**	**47**	**15**	**6**	**14**	**0**	**82**	**103.2**
TOTAL	**0**	**2**	**458**	**123**	**31**	**50**	**1**	**665**	**745.3**	**1**	**8**	**1405**	**185**	**48**	**27**	**16**	**1690**	**1759.5**	**0**	**1**	**231**	**61**	**20**	**33**	**0**	**346**	**398.3**
16:00 - 16:15	0	0	55	15	3	1	0	74	76.8	0	0	85	11	1	0	1	98	99.5	0	0	34	8	1	1	0	44	45.8
16:15 - 16:30	0	1	44	9	1	3	0	58	61.8	1	0	84	17	0	0	1	103	103.2	0	0	33	9	0	1	0	43	44.3
16:30 - 16:45	0	0	38	15	1	1	1	56	58.8	0	0	88	10	0	0	0	98	98.0	0	0	31	10	2	5	0	48	55.5
16:45 - 17:00	0	0	31	7	3	0	0	41	42.5	0	0	79	11	0	0	1	91	92.0	0	0	24	7	1	2	0	34	37.1
Hourly Tota	**0**	**1**	**168**	**46**	**8**	**5**	**1**	**229**	**239.9**	**1**	**0**	**336**	**49**	**1**	**0**	**3**	**390**	**392.7**	**0**	**0**	**122**	**34**	**4**	**9**	**0**	**169**	**182.7**
17:00 - 17:15	0	0	47	9	1	1	0	58	59.8	0	1	89	11	0	0	1	102	102.4	0	0	28	5	2	0	0	35	36.0
17:15 - 17:30	0	0	49	8	2	1	0	60	62.3	0	1	104	13	0	1	0	119	119.7	0	0	28	2	0	0	0	30	30.0
17:30 - 17:45	0	0	41	8	0	0	0	49	49.0	0	0	74	5	0	0	3	82	85.0	0	0	29	4	0	0	0	33	33.0
17:45 - 18:00	0	0	35	7	0	2	0	44	46.6	0	0	72	3	2	1	0	78	80.3	0	0	17	1	0	0	0	18	18.0
Hourly Tota	**0**	**0**	**172**	**32**	**3**	**4**	**0**	**211**	**217.7**	**0**	**2**	**339**	**32**	**2**	**2**	**4**	**381**	**387.4**	**0**	**0**	**102**	**12**	**2**	**0**	**0**	**116**	**117.0**
18:00 - 18:15	0	0	25	4	1	2	0	32	35.1	0	0	72	14	0	1	1	88	90.3	0	0	20	2	1	1	0	24	25.8
18:15 - 18:30	0	0	23	3	0	0	0	26	26.0	0	1	55	5	0	0	3	64	66.4	0	0	16	3	0	2	0	21	23.6
18:30 - 18:45	0	0	17	0	0	0	0	17	17.0	0	0	84	9	0	0	2	95	97.0	0	0	10	3	0	1	1	15	17.3
18:45 - 19:00	0	0	18	1	1	0	0	20	20.5	0	0	75	7	1	0	0	83	83.5	0	0	10	2	0	1	0	13	14.3
Hourly Tota	**0**	**0**	**83**	**8**	**2**	**2**	**0**	**95**	**98.6**	**0**	**1**	**286**	**35**	**1**	**1**	**6**	**330**	**337.2**	**0**	**0**	**56**	**10**	**1**	**5**	**1**	**73**	**81.0**
TOTAL	**0**	**1**	**423**	**86**	**13**	**11**	**1**	**535**	**556.2**	**1**	**3**	**961**	**116**	**4**	**3**	**13**	**1101**	**1117.3**	**0**	**0**	**280**	**56**	**7**	**14**	**1**	**358**	**380.7**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

APPENDIX 11 – A42/A453A/Top Brand Junction Turning Count Results

Road Data Services Ltd

East Midlands Airport
Wednesday 20th September 2023
Junction: 8
Approach: A453

	To Gelscoe Lane									To Top Brand									To A42 Entry Slip Road								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	3	0	0	0	0	3	3.0	0	0	10	0	0	1	0	11	12.3	0	0	6	5	2	1	0	14	16.3
07:15 - 07:30	1	0	11	1	0	0	0	13	12.2	0	1	7	3	0	8	0	19	28.8	0	0	18	2	1	0	0	21	21.5
07:30 - 07:45	0	0	11	2	1	0	0	14	14.5	0	1	14	5	0	4	0	24	28.6	0	0	9	1	1	0	0	11	11.5
07:45 - 08:00	0	0	11	2	0	0	0	13	13.0	0	0	12	2	0	6	0	20	27.8	0	0	17	2	1	0	0	20	20.5
Hourly Total	**1**	**0**	**36**	**5**	**1**	**0**	**0**	**43**	**42.7**	**0**	**2**	**43**	**10**	**0**	**19**	**0**	**74**	**97.5**	**0**	**0**	**50**	**10**	**5**	**1**	**0**	**66**	**69.8**
08:00 - 08:15	0	0	5	1	0	0	0	6	6.0	0	0	9	2	0	10	0	21	34.0	0	0	10	1	2	2	0	15	18.6
08:15 - 08:30	0	0	9	0	0	0	0	9	9.0	0	0	18	5	1	8	0	32	42.9	0	0	18	3	1	1	0	23	24.8
08:30 - 08:45	0	0	8	3	1	0	0	12	12.5	0	0	10	5	1	11	0	27	41.8	0	0	7	4	0	1	0	12	13.3
08:45 - 09:00	0	0	6	2	0	0	0	8	8.0	0	0	5	3	0	6	0	14	21.8	0	0	12	1	1	1	0	15	16.8
Hourly Total	**0**	**0**	**28**	**6**	**1**	**0**	**0**	**35**	**35.5**	**0**	**0**	**42**	**15**	**2**	**35**	**0**	**94**	**140.5**	**0**	**0**	**47**	**9**	**4**	**5**	**0**	**65**	**73.5**
09:00 - 09:15	0	0	6	1	0	0	0	7	7.0	0	0	7	2	0	6	0	15	22.8	0	0	8	3	0	0	0	11	11.0
09:15 - 09:30	0	0	3	2	0	1	0	6	7.3	0	0	5	2	0	7	0	14	23.1	0	0	1	1	0	1	0	3	4.3
09:30 - 09:45	0	0	3	4	2	0	0	9	10.0	0	0	4	2	1	6	0	13	21.3	0	0	8	1	1	0	0	10	10.5
09:45 - 10:00	1	0	3	0	0	0	0	4	3.2	0	0	5	0	0	15	0	20	39.5	0	0	3	2	1	2	0	8	11.1
Hourly Total	**1**	**0**	**15**	**7**	**2**	**1**	**0**	**26**	**27.5**	**0**	**0**	**21**	**6**	**1**	**34**	**0**	**62**	**106.7**	**0**	**0**	**20**	**7**	**2**	**3**	**0**	**32**	**36.9**
TOTAL	**2**	**0**	**79**	**18**	**4**	**1**	**0**	**104**	**105.7**	**0**	**2**	**106**	**31**	**3**	**88**	**0**	**230**	**344.7**	**0**	**0**	**117**	**26**	**11**	**9**	**0**	**163**	**180.2**
16:00 - 16:15	0	0	8	0	0	0	0	8	8.0	0	0	15	4	0	3	0	22	25.9	0	0	23	5	0	0	0	28	28.0
16:15 - 16:30	0	0	4	3	0	0	0	7	7.0	0	0	12	4	1	3	0	20	24.4	0	0	22	4	1	1	0	28	29.8
16:30 - 16:45	0	0	7	3	0	0	0	10	10.0	0	0	23	1	1	0	0	25	25.5	0	0	31	5	1	0	1	38	39.5
16:45 - 17:00	0	0	3	0	0	0	0	3	3.0	0	0	7	8	0	1	0	16	17.3	0	0	16	2	1	0	0	19	19.5
Hourly Total	**0**	**0**	**22**	**6**	**0**	**0**	**0**	**28**	**28.0**	**0**	**0**	**57**	**17**	**2**	**7**	**0**	**83**	**93.1**	**0**	**0**	**92**	**16**	**3**	**1**	**1**	**113**	**116.8**
17:00 - 17:15	0	0	11	1	0	0	0	12	12.0	0	1	26	2	0	0	0	29	28.4	0	0	18	10	0	0	0	28	28.0
17:15 - 17:30	0	0	4	0	0	0	0	4	4.0	0	0	24	0	0	0	0	24	24.0	0	0	33	4	1	0	0	38	38.5
17:30 - 17:45	0	0	8	1	0	0	0	9	9.0	0	0	20	4	0	0	0	24	24.0	0	0	21	2	0	1	0	24	25.3
17:45 - 18:00	0	0	6	0	0	0	0	6	6.0	0	1	12	1	0	0	0	14	13.4	0	0	11	3	0	0	0	14	14.0
Hourly Total	**0**	**0**	**29**	**2**	**0**	**0**	**0**	**31**	**31.0**	**0**	**2**	**82**	**7**	**0**	**0**	**0**	**91**	**89.8**	**0**	**0**	**83**	**19**	**1**	**1**	**0**	**104**	**105.8**
18:00 - 18:15	0	0	10	2	0	0	0	12	12.0	0	0	20	0	0	1	0	21	22.3	0	0	22	4	0	2	0	28	30.6
18:15 - 18:30	0	0	8	0	0	0	0	8	8.0	0	0	9	0	0	1	0	10	11.3	0	0	10	2	0	1	0	13	14.3
18:30 - 18:45	0	0	10	2	0	0	0	12	12.0	0	0	16	2	0	0	0	18	18.0	0	0	9	1	2	1	0	13	15.3
18:45 - 19:00	0	0	8	1	0	0	0	9	9.0	0	0	8	0	0	1	0	9	10.3	0	0	11	0	0	1	0	12	13.3
Hourly Total	**0**	**0**	**36**	**5**	**0**	**0**	**0**	**41**	**41.0**	**0**	**0**	**53**	**2**	**0**	**3**	**0**	**58**	**61.9**	**0**	**0**	**52**	**7**	**2**	**5**	**0**	**66**	**73.5**
TOTAL	**0**	**0**	**87**	**13**	**0**	**0**	**0**	**100**	**100.0**	**0**	**2**	**192**	**26**	**2**	**10**	**0**	**232**	**244.8**	**0**	**0**	**227**	**42**	**6**	**7**	**1**	**283**	**296.1**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Wednesday 20th September 2023
Junction: 8
Approach: Gelscoe Lane

	To Top Brand									To A42 Entry Slip Road									To A453								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	2	0	0	0	0	2	2.0	0	0	5	0	0	0	0	5	5.0	0	0	1	0	0	0	0	1	1.0
07:15 - 07:30	0	0	1	0	0	0	0	1	1.0	0	0	5	0	1	0	0	6	6.5	0	0	2	0	0	0	0	2	2.0
07:30 - 07:45	0	0	3	0	0	0	0	3	3.0	0	0	9	0	0	0	0	9	9.0	0	0	3	1	0	0	0	4	4.0
07:45 - 08:00	0	0	3	0	1	0	0	4	4.5	0	0	3	0	0	0	0	3	3.0	0	0	6	0	0	0	0	6	6.0
Hourly Total	**0**	**0**	**9**	**0**	**1**	**0**	**0**	**10**	**10.5**	**0**	**0**	**22**	**0**	**1**	**0**	**0**	**23**	**23.5**	**0**	**0**	**12**	**1**	**0**	**0**	**0**	**13**	**13.0**
08:00 - 08:15	0	0	3	0	0	0	0	3	3.0	0	0	4	0	2	0	0	6	7.0	0	0	5	0	0	0	0	5	5.0
08:15 - 08:30	0	0	0	1	0	0	0	1	1.0	0	0	4	0	0	0	0	4	4.0	0	0	4	0	0	0	0	4	4.0
08:30 - 08:45	0	0	3	0	0	0	0	3	3.0	0	0	1	0	0	0	0	1	1.0	0	0	4	1	0	0	0	5	5.0
08:45 - 09:00	0	0	0	0	0	0	0	0	0.0	0	0	3	0	1	0	0	4	4.5	0	0	7	0	0	0	0	7	7.0
Hourly Total	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**7**	**7.0**	**0**	**0**	**12**	**0**	**3**	**0**	**0**	**15**	**16.5**	**0**	**0**	**20**	**1**	**0**	**0**	**0**	**21**	**21.0**
09:00 - 09:15	0	0	1	1	0	0	0	2	2.0	0	0	2	1	0	0	0	3	3.0	0	0	6	0	0	0	0	6	6.0
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	0	5	0	0	0	0	5	5.0	0	0	1	1	0	0	0	2	2.0
09:30 - 09:45	0	0	4	0	0	0	0	4	4.0	0	0	3	0	0	0	0	3	3.0	0	0	2	0	0	0	0	2	2.0
09:45 - 10:00	0	0	0	0	0	0	0	0	0.0	0	0	3	0	1	0	0	4	4.5	0	0	3	0	0	0	0	3	3.0
Hourly Total	**0**	**0**	**5**	**1**	**0**	**0**	**0**	**6**	**6.0**	**0**	**0**	**13**	**1**	**1**	**0**	**0**	**15**	**15.5**	**0**	**0**	**12**	**1**	**0**	**0**	**0**	**13**	**13.0**
TOTAL	**0**	**0**	**20**	**2**	**1**	**0**	**0**	**23**	**23.5**	**0**	**0**	**47**	**1**	**5**	**0**	**0**	**53**	**55.5**	**0**	**0**	**44**	**3**	**0**	**0**	**0**	**47**	**47.0**
16:00 - 16:15	0	0	6	2	0	0	0	8	8.0	0	0	4	0	0	0	0	4	4.0	0	0	3	1	0	0	0	4	4.0
16:15 - 16:30	0	0	6	0	0	0	0	6	6.0	0	0	1	1	0	0	0	2	2.0	0	1	4	2	0	0	0	7	6.4
16:30 - 16:45	0	0	6	0	0	0	0	6	6.0	0	0	6	1	0	0	0	7	7.0	0	0	5	1	0	0	0	6	6.0
16:45 - 17:00	0	0	3	0	0	0	0	3	3.0	0	0	0	1	0	0	0	1	1.0	0	0	6	1	0	0	0	7	7.0
Hourly Total	**0**	**0**	**21**	**2**	**0**	**0**	**0**	**23**	**23.0**	**0**	**0**	**11**	**3**	**0**	**0**	**0**	**14**	**14.0**	**0**	**1**	**18**	**5**	**0**	**0**	**0**	**24**	**23.4**
17:00 - 17:15	0	0	4	0	0	0	0	4	4.0	0	0	7	1	0	0	0	8	8.0	1	0	9	0	0	0	0	10	9.2
17:15 - 17:30	0	0	4	0	0	0	0	4	4.0	0	0	4	1	0	0	0	5	5.0	0	0	6	2	0	0	0	8	8.0
17:30 - 17:45	0	0	2	0	0	0	0	2	2.0	0	0	3	1	0	0	0	4	4.0	0	0	4	0	0	0	0	4	4.0
17:45 - 18:00	0	0	2	1	0	0	0	3	3.0	0	0	2	0	0	0	0	2	2.0	0	0	1	1	0	0	0	2	2.0
Hourly Total	**0**	**0**	**12**	**1**	**0**	**0**	**0**	**13**	**13.0**	**0**	**0**	**16**	**3**	**0**	**0**	**0**	**19**	**19.0**	**1**	**0**	**20**	**3**	**0**	**0**	**0**	**24**	**23.2**
18:00 - 18:15	0	0	1	0	0	0	0	1	1.0	0	0	1	2	0	0	0	3	3.0	0	0	4	0	0	0	0	4	4.0
18:15 - 18:30	0	0	1	1	0	0	0	2	2.0	0	0	2	0	0	0	0	2	2.0	0	0	3	0	0	0	0	3	3.0
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	0	2	1	0	0	0	3	3.0	0	0	5	1	0	0	0	6	6.0
18:45 - 19:00	0	0	2	0	0	0	0	2	2.0	0	0	3	0	0	0	0	3	3.0	0	0	5	0	0	0	0	5	5.0
Hourly Total	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**5**	**5.0**	**0**	**0**	**8**	**3**	**0**	**0**	**0**	**11**	**11.0**	**0**	**0**	**17**	**1**	**0**	**0**	**0**	**18**	**18.0**
TOTAL	**0**	**0**	**37**	**4**	**0**	**0**	**0**	**41**	**41.0**	**0**	**0**	**35**	**9**	**0**	**0**	**0**	**44**	**44.0**	**1**	**1**	**55**	**9**	**0**	**0**	**0**	**66**	**64.6**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Wednesday 20th September 2023
Junction: 8
Approach: Top Brand

	To A42 Entry Slip Road									To A453									To Gelscoe Lane								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	1	0	0	6	0	7	14.8	0	0	9	2	1	4	0	16	21.7	0	0	2	0	0	1	0	3	4.3
07:15 - 07:30	0	0	0	2	0	6	0	8	15.8	0	0	18	4	2	9	0	33	45.7	0	0	9	2	0	0	0	11	11.0
07:30 - 07:45	0	0	0	0	0	2	0	2	4.6	0	0	31	2	0	13	0	46	62.9	0	0	5	0	0	0	0	5	5.0
07:45 - 08:00	0	0	1	0	0	7	0	8	17.1	0	0	23	4	0	6	1	34	42.8	0	0	5	2	0	0	0	7	7.0
Hourly Total	**0**	**0**	**2**	**2**	**0**	**21**	**0**	**25**	**52.3**	**0**	**0**	**81**	**12**	**3**	**32**	**1**	**129**	**173.1**	**0**	**0**	**21**	**4**	**0**	**1**	**0**	**26**	**27.3**
08:00 - 08:15	0	0	0	0	0	4	0	4	9.2	0	0	22	2	1	4	0	29	34.7	0	0	7	0	0	0	0	7	7.0
08:15 - 08:30	0	0	1	0	1	5	0	7	14.0	0	1	15	1	1	7	1	26	36.0	0	0	3	1	0	0	0	4	4.0
08:30 - 08:45	0	0	0	0	1	3	0	4	8.4	0	0	13	3	2	5	0	23	30.5	0	0	4	0	0	0	0	4	4.0
08:45 - 09:00	0	0	0	0	0	8	0	8	18.4	0	0	20	4	0	4	0	28	33.2	0	0	2	1	0	0	0	3	3.0
Hourly Total	**0**	**0**	**1**	**0**	**2**	**20**	**0**	**23**	**50.0**	**0**	**1**	**70**	**10**	**4**	**20**	**1**	**106**	**134.4**	**0**	**0**	**16**	**2**	**0**	**0**	**0**	**18**	**18.0**
09:00 - 09:15	0	0	0	0	0	1	0	1	2.3	0	0	6	1	0	3	0	10	13.9	0	0	1	0	0	0	0	1	1.0
09:15 - 09:30	0	0	0	0	0	6	0	6	13.8	0	0	8	4	0	5	0	17	23.5	0	0	4	0	0	0	0	4	4.0
09:30 - 09:45	0	0	0	0	0	4	0	4	9.2	0	0	7	2	0	2	0	11	13.6	0	0	7	0	0	0	0	7	7.0
09:45 - 10:00	0	0	0	0	0	5	0	5	11.5	0	0	7	1	0	1	0	9	10.3	0	0	4	0	0	0	0	4	4.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**16**	**0**	**16**	**36.8**	**0**	**0**	**28**	**8**	**0**	**11**	**0**	**47**	**61.3**	**0**	**0**	**16**	**0**	**0**	**0**	**0**	**16**	**16.0**
TOTAL	**0**	**0**	**3**	**2**	**2**	**57**	**0**	**64**	**139.1**	**0**	**1**	**179**	**30**	**7**	**63**	**2**	**282**	**368.8**	**0**	**0**	**53**	**6**	**0**	**1**	**0**	**60**	**61.3**
16:00 - 16:15	0	0	2	0	0	1	0	3	4.3	0	0	10	2	0	0	0	12	12.0	0	0	4	0	2	0	0	6	7.0
16:15 - 16:30	0	0	1	0	0	0	0	1	1.0	0	0	11	2	1	0	0	14	14.5	0	0	3	1	0	0	0	4	4.0
16:30 - 16:45	0	0	1	0	0	0	0	1	1.0	0	0	15	1	0	0	0	16	16.0	0	0	5	2	0	0	0	7	7.0
16:45 - 17:00	0	0	2	0	0	0	0	2	2.0	0	1	7	0	0	0	0	8	7.4	0	0	1	2	0	0	0	3	3.0
Hourly Total	**0**	**0**	**6**	**0**	**0**	**1**	**0**	**7**	**8.3**	**0**	**1**	**43**	**5**	**1**	**0**	**0**	**50**	**49.9**	**0**	**0**	**13**	**5**	**2**	**0**	**0**	**20**	**21.0**
17:00 - 17:15	0	0	1	0	0	0	0	1	1.0	1	0	14	3	0	1	0	19	19.5	0	0	1	0	0	0	0	1	1.0
17:15 - 17:30	0	0	1	0	0	0	0	1	1.0	0	0	12	1	0	0	0	13	13.0	0	0	3	0	0	0	0	3	3.0
17:30 - 17:45	0	0	0	0	0	0	0	0	0.0	0	0	11	0	0	1	0	12	13.3	0	0	1	0	0	0	0	1	1.0
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	0	11	0	0	0	0	11	11.0	0	0	2	0	0	0	0	2	2.0
Hourly Total	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2.0**	**1**	**0**	**48**	**4**	**0**	**2**	**0**	**55**	**56.8**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**7**	**7.0**
18:00 - 18:15	0	0	0	0	0	0	0	0	0.0	0	0	13	0	0	2	0	15	17.6	0	0	3	1	0	0	0	4	4.0
18:15 - 18:30	0	0	1	0	0	0	0	1	1.0	0	1	12	1	0	0	0	14	13.4	0	0	1	0	0	0	0	1	1.0
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	1	5	1	0	0	0	7	6.4	0	0	0	0	0	0	0	0	0.0
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	0	12	1	0	2	0	15	17.6	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**	**0**	**2**	**42**	**3**	**0**	**4**	**0**	**51**	**55.0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**5**	**5.0**
TOTAL	**0**	**0**	**9**	**0**	**0**	**1**	**0**	**10**	**11.3**	**1**	**3**	**133**	**12**	**1**	**6**	**0**	**156**	**161.7**	**0**	**0**	**24**	**6**	**2**	**0**	**0**	**32**	**33.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Wednesday 20th September 2023
Junction: 8
Approach: A42 Entry Slip Road

	To A453									To Gelscoe Lane									To Top Brand								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
07:45 - 08:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:15 - 08:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:45 - 09:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
09:30 - 09:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
09:45 - 10:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
16:00 - 16:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
16:15 - 16:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
16:30 - 16:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
16:45 - 17:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
17:00 - 17:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
17:15 - 17:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
17:30 - 17:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
18:00 - 18:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

APPENDIX 12 – A50 Junction 1 Turning Count Results

Road Data Services Ltd

East Midlands Airport
Thursday 21st September 2023
Junction: 3
Approach: B5010

	To B6540									To A50 J1 Slip Road (E)									To Ryecroft Road									To Trent Lane									To A50 J1 Slip Road (W)								
TIME	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	1	1	0	1	0	0	3	2.9	0	0	19	8	0	0	0	27	27.0	0	0	1	0	0	0	0	1	1.0	0	0	10	1	0	0	1	12	13.0	0	0	11	2	0	0	0	13	13.0
07:15 - 07:30	0	0	3	1	0	0	0	4	4.0	0	0	14	7	0	0	0	21	21.0	0	0	0	0	0	0	0	0	0.0	0	0	12	2	0	0	1	15	16.0	0	0	13	2	0	0	0	15	15.0
07:30 - 07:45	0	0	13	3	0	0	0	16	16.0	0	0	19	4	0	0	0	23	23.0	0	0	1	0	0	0	0	1	1.0	0	1	17	5	0	0	0	23	22.4	0	0	16	4	0	0	0	20	20.0
07:45 - 08:00	0	0	9	4	0	0	0	13	13.0	0	0	12	4	1	0	0	17	17.5	0	0	1	0	0	0	0	1	1.0	0	1	22	2	1	0	1	27	27.9	0	0	16	2	0	0	0	18	18.0
Hourly Total	**0**	**1**	**26**	**8**	**1**	**0**	**0**	**36**	**35.9**	**0**	**0**	**64**	**23**	**1**	**0**	**0**	**88**	**88.5**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	**3.0**	**0**	**2**	**61**	**10**	**1**	**0**	**3**	**77**	**79.3**	**0**	**0**	**56**	**10**	**0**	**0**	**0**	**66**	**66.0**
08:00 - 08:15	0	0	12	2	1	0	2	17	19.5	0	0	24	2	0	0	0	26	26.0	0	0	1	0	0	0	0	1	1.0	0	1	13	1	0	0	1	16	16.4	0	0	11	5	0	0	0	16	16.0
08:15 - 08:30	0	1	11	4	0	0	0	16	15.4	0	0	18	3	0	0	0	21	21.0	0	0	2	0	0	0	0	2	2.0	0	0	20	4	0	0	1	25	26.0	0	0	16	2	0	0	0	18	18.0
08:30 - 08:45	0	0	12	5	0	0	0	17	17.0	0	0	14	1	0	0	0	15	15.0	0	0	2	0	0	0	0	2	2.0	0	0	17	0	0	0	0	17	17.0	0	0	11	1	0	0	0	12	12.0
08:45 - 09:00	0	0	12	3	1	0	0	16	16.5	0	0	15	2	0	0	0	17	17.0	0	0	1	0	0	0	0	1	1.0	0	0	14	2	0	0	1	17	18.0	0	0	10	0	0	0	0	10	10.0
Hourly Total	**0**	**1**	**47**	**14**	**2**	**0**	**2**	**66**	**68.4**	**0**	**0**	**71**	**8**	**0**	**0**	**0**	**79**	**79.0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**6**	**6.0**	**0**	**1**	**64**	**7**	**0**	**0**	**3**	**75**	**77.4**	**0**	**0**	**48**	**8**	**0**	**0**	**0**	**56**	**56.0**
09:00 - 09:15	0	0	12	2	1	0	0	15	15.5	0	0	11	8	1	0	0	20	20.5	0	0	2	0	0	0	0	2	2.0	0	0	11	1	1	0	0	13	13.5	0	0	8	1	0	0	0	9	9.0
09:15 - 09:30	0	0	8	1	0	0	0	9	9.0	0	0	10	3	1	0	0	14	14.5	0	0	1	0	0	0	0	1	1.0	0	0	9	3	1	0	2	15	17.5	0	0	4	2	0	0	0	6	6.0
09:30 - 09:45	0	1	14	4	0	0	0	19	18.4	0	0	11	5	1	0	0	17	17.5	0	0	1	0	0	0	0	1	1.0	0	0	10	1	1	0	0	12	12.5	0	0	8	1	0	0	0	9	9.0
09:45 - 10:00	0	0	16	5	0	0	0	21	21.0	0	0	9	3	1	0	0	13	13.5	1	0	1	0	0	0	0	2	1.2	0	0	7	1	0	0	0	8	8.0	0	0	6	1	0	0	0	7	7.0
Hourly Total	**0**	**1**	**50**	**12**	**1**	**0**	**0**	**64**	**63.9**	**0**	**0**	**41**	**19**	**4**	**0**	**0**	**64**	**66.0**	**1**	**0**	**5**	**0**	**0**	**0**	**0**	**6**	**5.2**	**0**	**0**	**37**	**6**	**3**	**0**	**2**	**48**	**51.5**	**0**	**0**	**26**	**5**	**0**	**0**	**0**	**31**	**31.0**
TOTAL	**0**	**3**	**123**	**34**	**4**	**0**	**2**	**166**	**168.2**	**0**	**0**	**176**	**50**	**5**	**0**	**0**	**231**	**233.5**	**1**	**0**	**14**	**0**	**0**	**0**	**0**	**15**	**14.2**	**0**	**3**	**162**	**23**	**4**	**0**	**8**	**200**	**208.2**	**0**	**0**	**130**	**23**	**0**	**0**	**0**	**153**	**153.0**
16:00 - 16:15	0	0	13	3	0	0	0	16	16.0	0	0	24	4	0	0	0	28	28.0	1	0	0	0	0	0	0	1	0.2	0	0	15	2	0	0	0	17	17.0	0	0	14	2	0	0	0	16	16.0
16:15 - 16:30	0	0	17	0	0	0	0	17	17.0	0	0	18	3	0	0	0	21	21.0	0	0	1	0	0	0	0	1	1.0	0	2	15	2	0	0	2	21	21.8	0	0	12	1	0	0	0	13	13.0
16:30 - 16:45	0	0	11	0	2	0	0	13	14.0	0	0	15	2	0	0	0	17	17.0	0	0	1	0	0	0	0	1	1.0	0	1	14	2	1	0	1	19	19.9	0	0	17	3	0	0	0	20	20.0
16:45 - 17:00	0	1	9	3	0	0	0	13	12.4	0	0	16	2	0	0	0	18	18.0	0	0	1	0	0	0	0	1	1.0	0	0	15	1	0	0	1	17	18.0	0	0	16	1	0	0	0	17	17.0
Hourly Total	**0**	**1**	**50**	**6**	**2**	**0**	**0**	**59**	**59.4**	**0**	**0**	**73**	**11**	**0**	**0**	**0**	**84**	**84.0**	**1**	**0**	**3**	**0**	**0**	**0**	**0**	**4**	**3.2**	**0**	**3**	**59**	**7**	**1**	**0**	**4**	**74**	**76.7**	**0**	**0**	**59**	**7**	**0**	**0**	**0**	**66**	**66.0**
17:00 - 17:15	0	1	7	3	0	0	0	11	10.4	0	0	14	4	0	0	0	18	18.0	0	0	1	0	0	0	0	1	1.0	0	0	15	3	0	0	0	18	18.0	0	0	30	3	0	0	0	33	33.0
17:15 - 17:30	0	0	12	1	0	0	0	13	13.0	0	0	13	1	0	0	0	14	14.0	0	0	1	0	0	0	0	1	1.0	0	0	11	1	0	0	0	12	12.0	0	0	12	1	0	0	0	13	13.0
17:30 - 17:45	0	0	12	4	0	0	0	16	16.0	0	0	13	4	0	0	0	17	17.0	0	0	0	0	0	0	0	0	0.0	0	0	13	2	1	0	0	16	16.5	0	1	14	3	0	0	0	18	17.4
17:45 - 18:00	0	0	9	2	0	0	0	11	11.0	0	0	9	3	0	0	0	12	12.0	0	0	1	0	0	0	0	1	1.0	0	0	11	3	1	0	1	16	17.5	0	0	11	4	0	0	0	15	15.0
Hourly Total	**0**	**1**	**40**	**10**	**0**	**0**	**0**	**51**	**50.4**	**0**	**0**	**49**	**12**	**0**	**0**	**0**	**61**	**61.0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	**3.0**	**0**	**0**	**50**	**9**	**2**	**0**	**1**	**62**	**64.0**	**0**	**1**	**67**	**11**	**0**	**0**	**0**	**79**	**78.4**
18:00 - 18:15	0	2	10	3	0	0	0	15	13.8	0	0	17	2	0	0	0	19	19.0	0	0	0	0	0	0	0	0	0.0	0	0	18	1	0	0	2	21	23.0	0	0	13	1	0	0	0	14	14.0
18:15 - 18:30	0	0	7	1	0	0	0	8	8.0	0	0	8	2	0	0	0	10	10.0	0	0	0	0	0	0	0	0	0.0	0	0	10	2	0	0	0	12	12.0	0	0	5	1	0	0	0	6	6.0
18:30 - 18:45	0	0	16	2	0	0	0	18	18.0	0	0	6	0	0	0	0	6	6.0	0	0	0	0	0	0	0	0	0.0	0	0	9	1	0	0	0	10	10.0	0	0	5	1	0	0	0	6	6.0
18:45 - 19:00	0	0	10	0	0	0	0	10	10.0	0	0	7	2	0	0	0	9	9.0	0	0	1	0	0	0	0	1	1.0	0	0	10	0	0	0	0	10	10.0	0	0	8	0	0	0	0	8	8.0
Hourly Total	**0**	**2**	**43**	**6**	**0**	**0**	**0**	**51**	**49.8**	**0**	**0**	**38**	**6**	**0**	**0**	**0**	**44**	**44.0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**	**0**	**0**	**47**	**4**	**0**	**0**	**2**	**53**	**55.0**	**0**	**0**	**31**	**3**	**0**	**0**	**0**	**34**	**34.0**
TOTAL	**0**	**4**	**133**	**22**	**2**	**0**	**0**	**161**	**159.6**	**0**	**0**	**160**	**29**	**0**	**0**	**0**	**189**	**189.0**	**1**	**0**	**7**	**0**	**0**	**0**	**0**	**8**	**7.2**	**0**	**3**	**156**	**20**	**3**	**0**	**7**	**189**	**195.7**	**0**	**1**	**157**	**21**	**0**	**0**	**0**	**179**	**178.4**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Thursday 21st September 2023
Junction: 3
Approach: B6540

	To A50 J1 Slip Road (E)									To Ryecroft Road									To Trent Lane									To A50 J1 Slip Road (W)									To B5010								
TIME	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	36	11	1	5	0	53	60.0	0	0	1	0	0	0	0	1	1.0	0	6	31	3	0	0	2	42	40.4	0	0	39	10	2	4	0	55	61.2	0	1	6	1	0	0	0	8	7.4
07:15 - 07:30	0	1	65	15	2	7	0	90	99.5	0	0	2	0	0	0	0	2	2.0	0	1	40	4	2	1	2	50	53.7	0	0	48	5	2	2	0	57	60.6	0	0	6	1	0	0	0	7	7.0
07:30 - 07:45	0	1	66	13	1	3	0	84	87.8	0	0	3	0	0	0	0	3	3.0	0	2	51	6	1	0	1	61	61.3	0	0	49	2	1	2	0	54	57.1	0	0	10	0	0	0	0	10	10.0
07:45 - 08:00	0	1	56	18	4	1	0	80	82.7	0	0	2	0	0	0	0	2	2.0	0	2	47	5	2	0	0	56	55.8	0	0	31	9	0	0	0	40	40.0	0	0	8	3	0	0	0	11	11.0
Hourly Total	**0**	**3**	**223**	**57**	**8**	**16**	**0**	**307**	**330.0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**8**	**8.0**	**0**	**11**	**169**	**18**	**5**	**1**	**5**	**209**	**211.2**	**0**	**0**	**167**	**26**	**5**	**8**	**0**	**206**	**218.9**	**0**	**1**	**30**	**5**	**0**	**0**	**0**	**36**	**35.4**
08:00 - 08:15	0	1	59	8	5	2	0	75	79.5	0	0	3	0	0	0	0	3	3.0	0	1	44	2	0	1	0	48	48.7	0	0	29	7	0	2	0	38	40.6	0	0	5	1	0	0	0	6	6.0
08:15 - 08:30	0	0	41	5	4	3	0	53	58.9	0	0	3	0	0	0	0	3	3.0	0	0	55	8	1	0	1	65	66.5	0	0	43	6	3	3	0	55	60.4	0	0	8	2	0	0	0	10	10.0
08:30 - 08:45	0	0	43	8	4	1	0	56	59.3	0	0	3	1	0	0	0	4	4.0	0	0	58	2	0	2	0	62	64.6	0	0	34	10	0	0	1	45	46.0	0	0	10	1	0	0	0	11	11.0
08:45 - 09:00	0	0	27	14	2	5	0	48	55.5	0	0	3	1	0	0	0	4	4.0	0	0	40	7	2	0	1	50	52.0	0	0	28	6	0	2	0	36	38.6	0	0	5	3	0	0	1	9	10.0
Hourly Total	**0**	**1**	**170**	**35**	**15**	**11**	**0**	**232**	**253.2**	**0**	**0**	**12**	**2**	**0**	**0**	**0**	**14**	**14.0**	**0**	**1**	**197**	**19**	**3**	**3**	**2**	**225**	**231.8**	**0**	**0**	**134**	**29**	**3**	**7**	**1**	**174**	**185.6**	**0**	**0**	**28**	**7**	**0**	**0**	**1**	**36**	**37.0**
09:00 - 09:15	0	0	39	2	1	3	0	45	49.4	0	0	5	1	0	0	0	6	6.0	0	0	33	3	1	1	1	39	41.8	0	0	29	7	2	2	0	40	43.6	0	0	4	1	0	0	0	5	5.0
09:15 - 09:30	0	0	21	9	2	4	0	36	42.2	0	0	3	0	0	0	0	3	3.0	0	0	39	8	2	0	2	51	54.0	0	0	18	6	0	2	0	26	28.6	0	0	8	4	0	0	0	12	12.0
09:30 - 09:45	0	1	26	15	3	0	0	45	45.9	0	0	2	1	0	0	0	3	3.0	0	0	24	7	2	2	1	36	40.6	0	0	21	8	0	7	0	36	45.1	0	0	7	2	0	0	1	10	11.0
09:45 - 10:00	0	0	19	6	1	6	0	32	40.3	0	0	2	0	0	0	0	2	2.0	0	0	20	2	2	0	1	25	27.0	0	1	22	6	0	3	0	32	35.3	0	0	8	1	0	0	0	9	9.0
Hourly Total	**0**	**1**	**105**	**32**	**7**	**13**	**0**	**158**	**177.8**	**0**	**0**	**12**	**2**	**0**	**0**	**0**	**14**	**14.0**	**0**	**0**	**116**	**20**	**7**	**3**	**5**	**151**	**163.4**	**0**	**1**	**90**	**27**	**2**	**14**	**0**	**134**	**152.6**	**0**	**0**	**27**	**8**	**0**	**0**	**1**	**36**	**37.0**
TOTAL	**0**	**5**	**498**	**124**	**30**	**40**	**0**	**697**	**761.0**	**0**	**0**	**32**	**4**	**0**	**0**	**0**	**36**	**36.0**	**0**	**12**	**482**	**57**	**15**	**7**	**12**	**585**	**606.4**	**0**	**1**	**391**	**82**	**10**	**29**	**1**	**514**	**557.1**	**0**	**1**	**85**	**20**	**0**	**0**	**2**	**108**	**109.4**
16:00 - 16:15	0	0	36	8	1	6	0	51	59.3	0	0	1	1	0	0	0	2	2.0	0	1	27	6	0	2	3	39	44.0	0	1	26	8	0	2	0	37	39.0	0	0	8	2	0	0	0	10	10.0
16:15 - 16:30	0	1	33	8	2	6	0	50	58.2	0	0	2	1	0	0	0	3	3.0	0	1	36	4	1	1	0	43	44.2	0	0	32	6	0	1	0	39	40.3	0	0	14	2	0	0	0	16	16.0
16:30 - 16:45	0	0	34	5	1	4	0	44	49.7	0	0	2	0	0	0	0	2	2.0	0	0	36	9	0	1	0	46	47.3	0	0	41	8	0	4	0	53	58.2	0	0	11	2	0	0	0	13	13.0
16:45 - 17:00	0	1	42	8	3	6	0	60	68.7	0	0	3	0	0	0	0	3	3.0	0	0	45	4	0	0	2	51	53.0	0	1	46	2	0	0	0	49	48.4	0	1	17	3	0	0	0	21	20.4
Hourly Total	**0**	**2**	**145**	**29**	**7**	**22**	**0**	**205**	**235.9**	**0**	**0**	**8**	**2**	**0**	**0**	**0**	**10**	**10.0**	**0**	**2**	**144**	**23**	**1**	**4**	**5**	**179**	**188.5**	**0**	**2**	**145**	**24**	**0**	**7**	**0**	**178**	**185.9**	**0**	**1**	**50**	**9**	**0**	**0**	**0**	**60**	**59.4**
17:00 - 17:15	0	2	55	9	0	6	1	73	80.6	0	0	2	0	0	0	0	2	2.0	0	1	28	4	1	1	2	37	40.2	0	2	41	5	0	1	0	49	49.1	0	1	14	2	0	0	0	17	16.4
17:15 - 17:30	0	0	44	2	2	2	0	50	53.6	0	0	2	1	0	0	0	3	3.0	0	2	38	4	0	2	2	48	51.4	0	2	40	6	0	2	0	50	51.4	0	0	12	4	0	0	0	16	16.0
17:30 - 17:45	0	0	62	5	0	5	0	72	78.5	0	0	0	0	0	0	0	0	0.0	0	2	29	3	1	1	0	36	36.6	0	2	34	4	0	0	0	40	38.8	0	1	18	1	0	0	0	20	19.4
17:45 - 18:00	0	0	39	3	0	4	0	46	51.2	0	0	1	0	0	0	0	1	1.0	0	0	35	3	0	1	1	40	42.3	0	0	34	4	0	1	0	39	40.3	0	0	12	4	0	0	0	16	16.0
Hourly Total	**0**	**2**	**200**	**19**	**2**	**17**	**1**	**241**	**263.9**	**0**	**0**	**5**	**1**	**0**	**0**	**0**	**6**	**6.0**	**0**	**5**	**130**	**14**	**2**	**5**	**5**	**161**	**170.5**	**0**	**6**	**149**	**19**	**0**	**4**	**0**	**178**	**179.6**	**0**	**2**	**56**	**11**	**0**	**0**	**0**	**69**	**67.8**
18:00 - 18:15	0	0	48	6	0	6	0	60	67.8	0	0	0	0	0	0	0	0	0.0	0	3	35	7	0	0	2	47	47.2	0	0	26	1	0	0	0	27	27.0	0	0	12	2	0	0	0	14	14.0
18:15 - 18:30	0	0	31	7	1	3	1	43	48.4	0	0	1	1	0	0	0	2	2.0	0	0	42	5	0	0	1	48	49.0	0	0	25	2	0	0	0	27	27.0	0	0	16	6	0	0	0	22	22.0
18:30 - 18:45	0	0	31	4	0	3	0	38	41.9	0	0	1	0	0	0	0	1	1.0	0	0	47	2	0	1	2	52	55.3	0	0	22	1	0	0	0	23	23.0	0	0	13	1	0	0	0	14	14.0
18:45 - 19:00	0	0	27	8	0	4	0	39	44.2	0	0	1	0	0	0	0	1	1.0	0	1	34	6	0	1	1	43	44.7	0	0	25	3	0	1	0	29	30.3	0	1	11	2	0	0	0	14	13.4
Hourly Total	**0**	**0**	**137**	**25**	**1**	**16**	**1**	**180**	**202.3**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**4**	**4.0**	**0**	**4**	**158**	**20**	**0**	**2**	**6**	**190**	**196.2**	**0**	**0**	**98**	**7**	**0**	**1**	**0**	**106**	**107.3**	**0**	**1**	**52**	**11**	**0**	**0**	**0**	**64**	**63.4**
TOTAL	**0**	**4**	**482**	**73**	**10**	**55**	**2**	**626**	**702.1**	**0**	**0**	**16**	**4**	**0**	**0**	**0**	**20**	**20.0**	**0**	**11**	**432**	**57**	**3**	**11**	**16**	**530**	**555.2**	**0**	**8**	**392**	**50**	**0**	**12**	**0**	**462**	**472.8**	**0**	**4**	**158**	**31**	**0**	**0**	**0**	**193**	**190.6**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Thursday 21st September 2023
Junction: 3
Approach: A50 J1 Slip Road East

	To Ryecroft Road									To Trent Lane									To A50 J1 Slip Road (W)									To B5010									To B6540								
TIME	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	1	0	0	1	1.5	0	0	41	17	2	1	1	62	65.3	0	0	0	0	0	0	0	0	0.0	0	0	7	2	0	0	0	9	9.0	0	0	25	7	1	4	0	37	42.7
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	1	57	11	7	1	0	77	81.2	0	0	0	0	0	0	0	0	0.0	0	0	6	2	0	0	0	8	8.0	0	0	39	7	1	4	0	51	56.7
07:30 - 07:45	0	0	4	1	0	0	0	5	5.0	0	0	43	16	2	5	2	68	77.5	0	0	0	0	0	0	0	0	0.0	0	0	8	3	0	0	0	11	11.0	0	0	33	5	3	2	0	43	47.1
07:45 - 08:00	0	0	3	1	0	0	0	4	4.0	0	0	84	24	4	3	1	116	122.9	0	0	0	0	0	0	0	0	0.0	0	0	14	5	2	0	0	21	22.0	0	0	55	7	2	5	0	69	76.5
Hourly Total	**0**	**0**	**7**	**2**	**1**	**0**	**0**	**10**	**10.5**	**0**	**1**	**225**	**68**	**15**	**10**	**4**	**323**	**346.9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**35**	**12**	**2**	**0**	**0**	**49**	**50.0**	**0**	**0**	**152**	**26**	**7**	**15**	**0**	**200**	**223.0**
08:00 - 08:15	0	0	1	0	0	0	0	1	1.0	0	1	79	18	5	2	0	105	109.5	0	0	0	0	0	0	0	0	0.0	0	0	11	2	0	0	0	13	13.0	0	0	39	4	2	10	0	55	69.0
08:15 - 08:30	0	0	3	0	0	0	0	3	3.0	0	0	77	9	5	4	1	96	104.7	0	0	0	0	0	0	0	0	0.0	0	0	10	5	1	0	0	16	16.5	0	0	46	10	5	6	0	67	77.3
08:30 - 08:45	0	0	3	0	0	0	0	3	3.0	0	0	75	16	1	8	0	100	110.9	0	0	0	0	0	0	0	0	0.0	0	0	16	7	0	1	0	24	25.3	0	1	45	5	2	5	0	58	64.9
08:45 - 09:00	0	0	5	1	0	0	1	7	8.0	0	0	73	14	7	6	0	100	111.3	0	0	0	0	0	0	0	0	0.0	0	0	13	4	1	0	0	18	18.5	0	0	48	10	2	6	0	66	74.8
Hourly Total	**0**	**0**	**12**	**1**	**0**	**0**	**1**	**14**	**15.0**	**0**	**1**	**304**	**57**	**18**	**20**	**1**	**401**	**436.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**50**	**18**	**2**	**1**	**0**	**71**	**73.3**	**0**	**1**	**178**	**29**	**11**	**27**	**0**	**246**	**286.0**
09:00 - 09:15	0	0	4	1	0	0	0	5	5.0	0	0	60	16	6	4	0	86	94.2	0	0	0	0	0	0	0	0	0.0	0	0	6	4	1	0	0	11	11.5	0	0	45	19	0	4	0	68	73.2
09:15 - 09:30	0	0	4	0	1	0	0	5	5.5	0	0	32	10	9	3	0	54	62.4	0	0	0	0	0	0	0	0	0.0	0	0	9	4	0	0	0	13	13.0	0	0	53	13	2	5	0	73	80.5
09:30 - 09:45	0	0	2	1	0	0	0	3	3.0	0	0	36	6	9	6	0	57	69.3	0	0	0	0	0	0	0	0	0.0	0	0	13	2	1	0	0	16	16.5	0	0	40	11	5	4	0	60	67.7
09:45 - 10:00	0	0	1	1	0	0	0	2	2.0	0	0	25	11	2	0	1	39	41.0	0	0	0	0	0	0	0	0	0.0	0	0	10	5	0	0	0	15	15.0	0	1	34	4	4	7	0	50	60.5
Hourly Total	**0**	**0**	**11**	**3**	**1**	**0**	**0**	**15**	**15.5**	**0**	**0**	**153**	**43**	**26**	**13**	**1**	**236**	**266.9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**38**	**15**	**2**	**0**	**0**	**55**	**56.0**	**0**	**1**	**172**	**47**	**11**	**20**	**0**	**251**	**281.9**
TOTAL	**0**	**0**	**30**	**6**	**2**	**0**	**1**	**39**	**41.0**	**0**	**2**	**682**	**168**	**59**	**43**	**6**	**960**	**1050.2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**123**	**45**	**6**	**1**	**0**	**175**	**179.3**	**0**	**2**	**502**	**102**	**29**	**62**	**0**	**697**	**790.9**
16:00 - 16:15	0	0	4	0	0	1	0	5	6.3	0	0	37	11	2	8	0	58	69.4	0	0	0	0	0	0	0	0	0.0	0	0	11	4	0	0	0	15	15.0	0	0	39	10	1	5	0	55	62.0
16:15 - 16:30	0	0	1	1	0	0	0	2	2.0	0	0	49	8	4	6	0	67	76.8	0	0	0	0	0	0	0	0	0.0	0	0	20	4	0	0	0	24	24.0	0	1	47	12	2	3	0	65	69.3
16:30 - 16:45	0	0	2	1	0	1	0	4	5.3	0	1	59	13	3	5	0	81	88.4	0	0	0	0	0	0	0	0	0.0	0	0	18	4	1	0	0	23	23.5	0	3	50	10	4	3	0	70	74.1
16:45 - 17:00	0	0	1	0	0	0	0	1	1.0	0	0	59	6	4	1	0	70	73.3	0	0	0	0	0	0	0	0	0.0	0	0	22	5	0	0	0	27	27.0	0	0	57	9	0	4	0	70	75.2
Hourly Total	**0**	**0**	**8**	**2**	**0**	**2**	**0**	**12**	**14.6**	**0**	**1**	**204**	**38**	**13**	**20**	**0**	**276**	**307.9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**71**	**17**	**1**	**0**	**0**	**89**	**89.5**	**0**	**4**	**193**	**41**	**7**	**15**	**0**	**260**	**280.6**
17:00 - 17:15	0	0	1	0	0	0	0	1	1.0	0	0	48	11	6	1	0	66	70.3	0	0	0	0	0	0	0	0	0.0	0	0	27	3	0	0	0	30	30.0	0	0	52	3	2	1	0	58	60.3
17:15 - 17:30	0	0	3	0	0	1	0	4	5.3	0	0	61	9	2	5	0	77	84.5	0	0	0	0	0	0	0	0	0.0	0	0	21	4	0	0	0	25	25.0	0	0	57	6	0	5	0	68	74.5
17:30 - 17:45	0	0	3	0	0	0	0	3	3.0	0	0	53	11	3	5	0	72	80.0	0	0	0	0	0	0	0	0	0.0	0	0	27	4	0	0	0	31	31.0	0	0	66	4	0	3	0	73	76.9
17:45 - 18:00	0	0	4	1	1	0	0	6	6.5	0	0	64	5	2	8	2	81	94.4	0	0	0	0	0	0	0	0	0.0	0	0	25	6	2	0	0	33	34.0	0	0	50	9	1	4	0	64	69.7
Hourly Total	**0**	**0**	**11**	**1**	**1**	**1**	**0**	**14**	**15.8**	**0**	**0**	**226**	**36**	**13**	**19**	**2**	**296**	**329.2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**100**	**17**	**2**	**0**	**0**	**119**	**120.0**	**0**	**0**	**225**	**22**	**3**	**13**	**0**	**263**	**281.4**
18:00 - 18:15	0	0	4	0	0	0	0	4	4.0	0	1	64	4	4	1	0	74	76.7	0	0	0	0	0	0	0	0	0.0	0	0	20	1	0	0	0	21	21.0	0	0	45	13	1	4	0	63	68.7
18:15 - 18:30	0	0	4	0	0	0	0	4	4.0	0	0	37	4	0	4	0	45	50.2	0	0	0	0	0	0	0	0	0.0	0	0	14	4	0	0	0	18	18.0	0	0	44	5	0	7	0	56	65.1
18:30 - 18:45	0	0	1	0	0	0	0	1	1.0	0	0	50	4	4	2	0	60	64.6	0	0	0	0	0	0	0	0	0.0	0	1	14	2	0	0	0	17	16.4	0	0	26	2	1	2	0	31	34.1
18:45 - 19:00	0	0	1	1	0	0	0	2	2.0	0	0	35	4	2	1	0	42	44.3	0	0	0	0	0	0	0	0	0.0	0	0	11	2	0	0	0	13	13.0	0	0	31	2	2	2	0	37	40.6
Hourly Total	**0**	**0**	**10**	**1**	**0**	**0**	**0**	**11**	**11.0**	**0**	**1**	**186**	**16**	**10**	**8**	**0**	**221**	**235.8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**59**	**9**	**0**	**0**	**0**	**69**	**68.4**	**0**	**0**	**146**	**22**	**4**	**15**	**0**	**187**	**208.5**
TOTAL	**0**	**0**	**29**	**4**	**1**	**3**	**0**	**37**	**41.4**	**0**	**2**	**616**	**90**	**36**	**47**	**2**	**793**	**872.9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**230**	**43**	**3**	**0**	**0**	**277**	**277.9**	**0**	**4**	**564**	**85**	**14**	**43**	**0**	**710**	**770.5**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Thursday 21st September 2023
Junction: 3
Approach: Ryecroft Road

	To Trent Lane									To A50 J1 Slip Road (W)									To B5010									To B6540									To A50 J1 Slip Road (E)								
TIME	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	2	1	0	0	0	3	3.0	0	0	2	1	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0	0	0	2	1	0	0	0	3	3.0	0	0	3	2	0	0	0	5	5.0
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	3	0	0	0	0	3	3.0
07:30 - 07:45	0	0	1	1	0	0	1	3	4.0	0	0	4	1	0	0	0	5	5.0	0	0	1	0	0	0	0	1	1.0	0	0	3	0	0	0	0	3	3.0	0	0	2	1	0	0	0	3	3.0
07:45 - 08:00	0	0	2	1	0	0	0	3	3.0	0	0	2	1	0	0	0	3	3.0	0	0	1	0	0	0	0	1	1.0	0	0	3	1	0	0	0	4	4.0	0	0	4	1	0	0	0	5	5.0
Hourly Total	**0**	**0**	**5**	**3**	**0**	**0**	**1**	**9**	**10.0**	**0**	**0**	**9**	**3**	**0**	**0**	**0**	**12**	**12.0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2.0**	**0**	**0**	**9**	**2**	**0**	**0**	**0**	**11**	**11.0**	**0**	**0**	**12**	**4**	**0**	**0**	**0**	**16**	**16.0**
08:00 - 08:15	0	0	2	0	0	0	0	2	2.0	0	0	1	2	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0	0	0	1	1	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0
08:15 - 08:30	0	0	6	0	0	0	0	6	6.0	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0	0	0	5	1	0	0	0	6	6.0
08:30 - 08:45	0	0	2	0	0	0	0	2	2.0	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0
08:45 - 09:00	0	0	2	2	0	0	0	4	4.0	0	0	2	0	0	0	0	2	2.0	0	0	1	1	0	0	0	2	2.0	0	0	2	1	0	0	0	3	3.0	0	0	4	1	0	0	0	5	5.0
Hourly Total	**0**	**0**	**12**	**2**	**0**	**0**	**0**	**14**	**14.0**	**0**	**0**	**6**	**2**	**0**	**0**	**0**	**8**	**8.0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**3**	**3.0**	**0**	**0**	**6**	**2**	**0**	**0**	**0**	**8**	**8.0**	**0**	**0**	**11**	**2**	**0**	**0**	**0**	**13**	**13.0**
09:00 - 09:15	0	0	1	0	0	1	0	2	3.3	0	0	3	0	0	0	0	3	3.0	0	0	1	0	0	0	0	1	1.0	0	0	3	0	0	0	0	3	3.0	0	0	3	1	0	0	0	4	4.0
09:15 - 09:30	0	0	2	0	0	0	0	2	2.0	0	0	2	1	0	0	0	3	3.0	0	0	1	1	0	0	0	2	2.0	0	0	4	2	0	0	0	6	6.0	0	0	3	0	0	0	0	3	3.0
09:30 - 09:45	0	0	2	1	0	0	0	3	3.0	0	0	1	1	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0	0	0	1	1	0	0	0	2	2.0	0	0	2	1	0	0	0	3	3.0
09:45 - 10:00	0	0	2	0	0	0	0	2	2.0	0	0	2	0	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0	0	0	4	0	0	0	0	4	4.0	0	0	1	0	0	0	0	1	1.0
Hourly Total	**0**	**0**	**7**	**1**	**0**	**1**	**0**	**9**	**10.3**	**0**	**0**	**8**	**2**	**0**	**0**	**0**	**10**	**10.0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**5**	**5.0**	**0**	**0**	**12**	**3**	**0**	**0**	**0**	**15**	**15.0**	**0**	**0**	**9**	**2**	**0**	**0**	**0**	**11**	**11.0**
TOTAL	**0**	**0**	**24**	**6**	**0**	**1**	**1**	**32**	**34.3**	**0**	**0**	**23**	**7**	**0**	**0**	**0**	**30**	**30.0**	**0**	**0**	**8**	**2**	**0**	**0**	**0**	**10**	**10.0**	**0**	**0**	**27**	**7**	**0**	**0**	**0**	**34**	**34.0**	**0**	**0**	**32**	**8**	**0**	**0**	**0**	**40**	**40.0**
16:00 - 16:15	0	0	3	1	0	0	0	4	4.0	0	0	5	1	0	0	0	6	6.0	0	0	2	0	0	0	0	2	2.0	0	0	4	1	0	0	0	5	5.0	0	0	3	1	0	0	0	4	4.0
16:15 - 16:30	0	0	5	0	0	0	0	5	5.0	0	0	2	1	0	0	0	3	3.0	0	0	1	0	0	0	0	1	1.0	0	0	2	0	0	0	0	2	2.0	0	0	2	1	0	0	0	3	3.0
16:30 - 16:45	0	0	1	0	0	0	0	1	1.0	0	0	2	0	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0	0	0	2	0	0	0	0	2	2.0	0	0	4	0	0	0	0	4	4.0
16:45 - 17:00	0	0	1	1	0	0	0	2	2.0	0	0	4	1	0	0	0	5	5.0	0	0	2	0	0	0	0	2	2.0	0	0	4	1	0	0	0	5	5.0	0	0	5	0	0	0	0	5	5.0
Hourly Total	**0**	**0**	**10**	**2**	**0**	**0**	**0**	**12**	**12.0**	**0**	**0**	**13**	**3**	**0**	**0**	**0**	**16**	**16.0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**6**	**6.0**	**0**	**0**	**12**	**2**	**0**	**0**	**0**	**14**	**14.0**	**0**	**0**	**14**	**2**	**0**	**0**	**0**	**16**	**16.0**
17:00 - 17:15	0	0	1	0	0	0	0	1	1.0	0	0	6	0	0	0	0	6	6.0	0	0	2	0	0	0	0	2	2.0	0	0	4	1	0	0	0	5	5.0	0	0	6	1	0	0	0	7	7.0
17:15 - 17:30	0	0	3	0	0	0	0	3	3.0	0	0	3	0	0	0	0	3	3.0	0	0	1	0	0	0	0	1	1.0	0	0	3	2	0	0	0	5	5.0	0	0	1	0	0	0	0	1	1.0
17:30 - 17:45	0	0	4	1	0	1	0	6	7.3	0	0	3	0	0	0	0	3	3.0	0	0	1	0	0	0	0	1	1.0	0	0	2	0	0	0	0	2	2.0	0	0	4	0	0	0	0	4	4.0
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0	0	0	1	0	0	0	0	1	1.0	0	0	2	1	0	0	0	3	3.0	0	0	5	0	0	0	0	5	5.0
Hourly Total	**0**	**0**	**8**	**1**	**0**	**1**	**0**	**10**	**11.3**	**0**	**0**	**15**	**0**	**0**	**0**	**0**	**15**	**15.0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**5**	**5.0**	**0**	**0**	**11**	**4**	**0**	**0**	**0**	**15**	**15.0**	**0**	**0**	**16**	**1**	**0**	**0**	**0**	**17**	**17.0**
18:00 - 18:15	0	0	2	0	0	0	0	2	2.0	0	0	4	0	0	0	0	4	4.0	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0	0	0	3	0	0	0	0	3	3.0
18:15 - 18:30	0	0	1	0	0	0	0	1	1.0	0	0	2	0	0	0	0	2	2.0	0	0	2	1	0	0	0	3	3.0	2	0	4	0	0	0	0	6	4.4	0	0	3	0	0	0	0	3	3.0
18:30 - 18:45	0	0	2	1	0	0	0	3	3.0	0	0	2	0	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0	0	0	2	0	0	0	0	2	2.0	0	0	2	0	1	0	0	3	3.5
18:45 - 19:00	0	0	1	0	0	0	0	1	1.0	0	0	2	2	0	0	0	4	4.0	0	0	1	0	0	0	0	1	1.0	0	0	3	1	0	0	0	4	4.0	0	0	2	0	0	0	0	2	2.0
Hourly Total	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**7**	**7.0**	**0**	**0**	**10**	**2**	**0**	**0**	**0**	**12**	**12.0**	**0**	**0**	**5**	**1**	**0**	**0**	**0**	**6**	**6.0**	**2**	**0**	**10**	**1**	**0**	**0**	**0**	**13**	**11.4**	**0**	**0**	**10**	**0**	**1**	**0**	**0**	**11**	**11.5**
TOTAL	**0**	**0**	**24**	**4**	**0**	**1**	**0**	**29**	**30.3**	**0**	**0**	**38**	**5**	**0**	**0**	**0**	**43**	**43.0**	**0**	**0**	**16**	**1**	**0**	**0**	**0**	**17**	**17.0**	**2**	**0**	**33**	**7**	**0**	**0**	**0**	**42**	**40.4**	**0**	**0**	**40**	**3**	**1**	**0**	**0**	**44**	**44.5**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Thursday 21st September 2023
Junction: 3
Approach: Trent Lane

	To A50 J1 Slip Road (W)									To B5010									To B6540									To A50 J1 Slip Road (E)									To Ryecroft Road								
TIME	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	38	14	2	4	0	58	64.2	0	0	5	1	0	0	0	6	6.0	0	0	15	2	0	1	1	19	21.3	0	0	38	8	2	3	0	51	55.9	0	0	1	0	0	0	0	1	1.0
07:15 - 07:30	0	0	44	12	8	7	0	71	84.1	0	0	4	1	0	0	1	6	7.0	0	0	13	2	1	1	1	18	20.8	0	0	43	7	4	2	0	56	60.6	0	0	1	0	0	0	0	1	1.0
07:30 - 07:45	0	0	70	13	6	1	0	90	94.3	0	0	8	1	1	0	1	11	12.5	0	0	26	4	2	0	1	33	35.0	0	0	57	10	7	0	0	74	77.5	0	0	3	0	0	0	0	3	3.0
07:45 - 08:00	0	0	62	15	3	3	0	83	88.4	0	0	8	2	2	0	0	12	13.0	0	0	30	3	2	1	1	37	40.3	0	0	45	8	4	3	0	60	65.9	0	0	2	0	0	0	0	2	2.0
Hourly Total	**0**	**0**	**214**	**54**	**19**	**15**	**0**	**302**	**331.0**	**0**	**0**	**25**	**5**	**3**	**0**	**2**	**35**	**38.5**	**0**	**0**	**84**	**11**	**5**	**3**	**4**	**107**	**117.4**	**0**	**0**	**183**	**33**	**17**	**8**	**0**	**241**	**259.9**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**7**	**7.0**
08:00 - 08:15	0	0	69	4	1	3	0	77	81.4	0	0	7	1	0	0	2	10	12.0	1	0	19	10	1	1	2	34	37.0	0	0	59	5	6	7	0	77	89.1	0	0	4	1	0	0	0	5	5.0
08:15 - 08:30	0	0	55	11	4	3	0	73	78.9	0	0	5	3	1	0	0	9	9.5	0	0	19	6	1	0	2	28	30.5	0	0	38	8	4	0	0	50	52.0	0	0	2	0	0	0	0	2	2.0
08:30 - 08:45	0	0	37	5	2	2	0	46	49.6	0	0	8	3	0	0	0	11	11.0	0	0	18	3	1	1	0	23	24.8	0	0	33	9	4	2	0	48	52.6	0	0	3	1	0	0	0	4	4.0
08:45 - 09:00	0	0	40	5	2	2	0	49	52.6	0	0	6	3	1	0	2	12	14.5	0	1	18	6	0	1	0	26	26.7	0	0	45	8	2	4	0	59	65.2	0	0	4	0	0	0	0	4	4.0
Hourly Total	**0**	**0**	**201**	**25**	**9**	**10**	**0**	**245**	**262.5**	**0**	**0**	**26**	**10**	**2**	**0**	**4**	**42**	**47.0**	**1**	**1**	**74**	**25**	**3**	**3**	**4**	**111**	**119.0**	**0**	**0**	**175**	**30**	**16**	**13**	**0**	**234**	**258.9**	**0**	**0**	**13**	**2**	**0**	**0**	**0**	**15**	**15.0**
09:00 - 09:15	0	1	33	13	2	2	0	51	54.0	0	0	4	0	1	0	0	5	5.5	0	1	27	0	0	1	0	29	29.7	0	0	36	3	5	5	0	49	58.0	0	0	5	0	0	0	0	5	5.0
09:15 - 09:30	0	0	28	8	1	1	0	38	39.8	0	0	4	2	0	0	3	9	12.0	0	1	17	6	0	1	0	25	25.7	0	0	26	5	5	5	0	41	50.0	0	0	3	1	0	0	0	4	4.0
09:30 - 09:45	0	0	32	10	0	3	0	45	48.9	0	0	7	1	1	0	1	10	11.5	0	0	17	3	1	1	2	24	27.8	0	0	31	13	7	4	0	55	63.7	0	0	3	0	0	0	0	3	3.0
09:45 - 10:00	0	0	27	7	3	1	0	38	40.8	0	0	5	2	0	0	0	7	7.0	0	0	15	2	1	1	1	20	22.8	0	0	21	9	7	7	0	44	56.6	0	0	2	0	0	0	0	2	2.0
Hourly Total	**0**	**1**	**120**	**38**	**6**	**7**	**0**	**172**	**183.5**	**0**	**0**	**20**	**5**	**2**	**0**	**4**	**31**	**36.0**	**0**	**2**	**76**	**11**	**2**	**4**	**3**	**98**	**106.0**	**0**	**0**	**114**	**30**	**24**	**21**	**0**	**189**	**228.3**	**0**	**0**	**13**	**1**	**0**	**0**	**0**	**14**	**14.0**
TOTAL	**0**	**1**	**535**	**117**	**34**	**32**	**0**	**719**	**777.0**	**0**	**0**	**71**	**20**	**7**	**0**	**10**	**108**	**121.5**	**1**	**3**	**234**	**47**	**10**	**10**	**11**	**316**	**342.4**	**0**	**0**	**472**	**93**	**57**	**42**	**0**	**664**	**747.1**	**0**	**0**	**33**	**3**	**0**	**0**	**0**	**36**	**36.0**
16:00 - 16:15	0	0	99	18	4	3	0	124	129.9	0	1	17	2	0	0	0	20	19.4	0	2	53	4	0	2	3	64	68.4	0	0	98	20	3	2	0	123	127.1	0	0	4	2	0	0	0	6	6.0
16:15 - 16:30	0	0	67	8	3	2	0	80	84.1	0	0	19	3	0	0	0	22	22.0	0	4	43	6	1	0	0	54	52.1	0	0	66	15	4	3	0	88	93.9	0	0	4	0	0	0	0	4	4.0
16:30 - 16:45	0	1	84	14	1	2	0	102	104.5	0	0	22	3	0	0	0	25	25.0	0	3	57	5	0	0	0	65	63.2	0	0	88	13	0	1	0	102	103.3	0	0	4	0	0	0	0	4	4.0
16:45 - 17:00	0	1	82	8	1	2	0	94	96.5	0	1	19	3	0	0	3	26	28.4	0	4	44	3	2	1	3	57	59.9	0	0	66	11	2	3	0	82	86.9	0	0	5	1	0	0	0	6	6.0
Hourly Total	**0**	**2**	**332**	**48**	**9**	**9**	**0**	**400**	**415.0**	**0**	**2**	**77**	**11**	**0**	**0**	**3**	**93**	**94.8**	**0**	**13**	**197**	**18**	**3**	**3**	**6**	**240**	**243.6**	**0**	**0**	**318**	**59**	**9**	**9**	**0**	**395**	**411.2**	**0**	**0**	**17**	**3**	**0**	**0**	**0**	**20**	**20.0**
17:00 - 17:15	0	0	137	5	3	5	0	150	158.0	0	1	29	2	0	0	0	32	31.4	0	4	62	3	0	1	0	70	68.9	0	0	119	7	2	2	0	130	133.6	0	0	5	2	0	0	0	7	7.0
17:15 - 17:30	0	1	92	6	2	2	0	103	106.0	0	0	20	5	0	0	0	25	25.0	0	2	49	7	0	1	1	60	61.1	0	0	87	10	4	3	0	104	109.9	0	0	4	0	0	0	0	4	4.0
17:30 - 17:45	0	2	120	3	1	0	0	126	125.3	0	2	24	2	0	0	0	28	26.8	0	1	56	4	0	0	2	63	64.4	0	0	90	7	1	2	0	100	103.1	0	0	2	1	0	0	0	3	3.0
17:45 - 18:00	0	0	92	11	0	3	0	106	109.9	0	1	18	3	0	0	0	22	21.4	0	0	33	4	0	0	0	37	37.0	0	0	57	6	0	2	0	65	67.6	0	0	3	0	0	0	0	3	3.0
Hourly Total	**0**	**3**	**441**	**25**	**6**	**10**	**0**	**485**	**499.2**	**0**	**4**	**91**	**12**	**0**	**0**	**0**	**107**	**104.6**	**0**	**7**	**200**	**18**	**0**	**2**	**3**	**230**	**231.4**	**0**	**0**	**353**	**30**	**7**	**9**	**0**	**399**	**414.2**	**0**	**0**	**14**	**3**	**0**	**0**	**0**	**17**	**17.0**
18:00 - 18:15	0	2	101	6	2	1	0	112	113.1	0	0	23	1	0	0	3	27	30.0	0	3	47	2	1	0	2	55	55.7	0	0	73	3	0	0	1	77	78.0	0	0	2	0	0	0	0	2	2.0
18:15 - 18:30	0	2	62	6	0	1	0	71	71.1	0	0	15	3	0	0	0	18	18.0	0	3	38	3	1	1	0	46	46.0	0	1	70	6	1	2	0	80	82.5	0	0	1	0	0	0	0	1	1.0
18:30 - 18:45	0	0	99	5	1	2	0	107	110.1	0	1	22	2	0	0	1	26	26.4	0	2	35	2	0	1	1	41	42.1	0	0	54	2	2	1	0	59	61.3	0	0	2	0	0	0	0	2	2.0
18:45 - 19:00	0	0	38	6	1	1	0	46	47.8	0	0	11	0	0	0	0	11	11.0	0	2	29	0	0	0	1	32	31.8	0	0	37	0	2	0	0	39	40.0	0	0	3	0	0	0	0	3	3.0
Hourly Total	**0**	**4**	**300**	**23**	**4**	**5**	**0**	**336**	**342.1**	**0**	**1**	**71**	**6**	**0**	**0**	**4**	**82**	**85.4**	**0**	**10**	**149**	**7**	**2**	**2**	**4**	**174**	**175.6**	**0**	**1**	**234**	**11**	**5**	**3**	**1**	**255**	**261.8**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**8**	**8.0**
TOTAL	**0**	**9**	**1073**	**96**	**19**	**24**	**0**	**1221**	**1256.3**	**0**	**7**	**239**	**29**	**0**	**0**	**7**	**282**	**284.8**	**0**	**30**	**546**	**43**	**5**	**7**	**13**	**644**	**650.6**	**0**	**1**	**905**	**100**	**21**	**21**	**1**	**1049**	**1087.2**	**0**	**0**	**39**	**6**	**0**	**0**	**0**	**45**	**45.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Thursday 21st September 2023
Junction: 3
Approach: A50 J1 Slip Road West

	To B5010									To B6540									To A50 J1 Slip Road (E)									To Ryecroft Road									To Trent Lane								
TIME	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCL	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	2	0	0	0	0	2	2.0	0	0	27	9	1	1	0	38	39.8	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	40	10	4	3	0	57	62.9
07:15 - 07:30	0	0	0	1	0	0	0	1	1.0	0	0	33	8	1	2	0	44	47.1	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	0	0	76	12	3	3	0	94	99.4
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0	0	0	47	4	2	6	0	59	67.8	0	0	0	0	0	0	0	0	0.0	0	0	4	1	0	0	0	5	5.0	0	1	79	14	3	6	0	103	111.7
07:45 - 08:00	0	0	4	2	0	0	0	6	6.0	0	0	35	7	1	4	0	47	52.7	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0	0	0	91	10	3	1	0	105	107.8
Hourly Total	**0**	**0**	**6**	**3**	**0**	**0**	**0**	**9**	**9.0**	**0**	**0**	**142**	**28**	**5**	**13**	**0**	**188**	**207.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**10**	**1**	**0**	**0**	**0**	**11**	**11.0**	**0**	**1**	**286**	**46**	**13**	**13**	**0**	**359**	**381.8**
08:00 - 08:15	0	0	3	1	0	0	0	4	4.0	0	0	40	11	2	9	0	62	74.7	0	0	0	0	0	0	0	0	0.0	0	0	4	0	0	0	0	4	4.0	0	0	72	14	4	3	0	93	98.9
08:15 - 08:30	0	0	4	0	0	0	0	4	4.0	0	0	37	8	1	3	0	49	53.4	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0	0	0	88	16	6	6	0	116	126.8
08:30 - 08:45	0	0	7	3	0	0	0	10	10.0	0	0	39	7	1	2	0	49	52.1	0	0	0	0	0	0	0	0	0.0	0	0	4	1	0	0	0	5	5.0	0	0	90	8	3	2	0	103	107.1
08:45 - 09:00	0	0	1	1	0	0	0	2	2.0	0	0	44	6	0	5	0	55	61.5	0	0	0	0	0	0	0	0	0.0	0	0	6	1	0	1	0	8	9.3	0	0	84	6	4	5	0	99	107.5
Hourly Total	**0**	**0**	**15**	**5**	**0**	**0**	**0**	**20**	**20.0**	**0**	**0**	**160**	**32**	**4**	**19**	**0**	**215**	**241.7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**17**	**2**	**0**	**1**	**0**	**20**	**21.3**	**0**	**0**	**334**	**44**	**17**	**16**	**0**	**411**	**440.3**
09:00 - 09:15	0	0	0	2	0	0	0	2	2.0	0	0	28	3	3	1	0	35	37.8	0	0	0	0	0	0	0	0	0.0	0	0	4	1	0	0	0	5	5.0	0	0	34	11	5	5	0	55	64.0
09:15 - 09:30	0	0	4	1	0	0	0	5	5.0	0	0	23	8	0	7	0	38	47.1	0	0	0	0	0	0	0	0	0.0	0	0	4	1	0	0	0	5	5.0	0	0	42	7	3	7	0	59	69.6
09:30 - 09:45	0	0	4	1	0	0	0	5	5.0	0	0	20	8	1	2	0	31	34.1	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0	0	0	32	9	2	4	0	47	53.2
09:45 - 10:00	0	0	4	2	0	0	0	6	6.0	0	1	30	10	1	4	0	46	51.1	0	0	0	0	0	0	0	0	0.0	0	0	2	1	0	0	0	3	3.0	0	0	31	5	1	2	0	39	42.1
Hourly Total	**0**	**0**	**12**	**6**	**0**	**0**	**0**	**18**	**18.0**	**0**	**1**	**101**	**29**	**5**	**14**	**0**	**150**	**170.1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**13**	**3**	**0**	**0**	**0**	**16**	**16.0**	**0**	**0**	**139**	**32**	**11**	**18**	**0**	**200**	**228.9**
TOTAL	**0**	**0**	**33**	**14**	**0**	**0**	**0**	**47**	**47.0**	**0**	**1**	**403**	**89**	**14**	**46**	**0**	**553**	**619.2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**40**	**6**	**0**	**1**	**0**	**47**	**48.3**	**0**	**1**	**759**	**122**	**41**	**47**	**0**	**970**	**1051.0**
16:00 - 16:15	0	0	6	0	0	0	0	6	6.0	0	0	45	8	2	0	0	55	56.0	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	0	0	53	7	2	4	0	66	72.2
16:15 - 16:30	0	0	5	0	0	0	0	5	5.0	0	0	41	8	1	3	0	53	57.4	0	0	0	0	0	0	0	0	0.0	0	0	2	1	0	0	0	3	3.0	0	0	52	11	4	5	0	72	80.5
16:30 - 16:45	0	0	5	1	0	0	0	6	6.0	0	1	38	7	0	1	0	47	47.7	0	0	0	0	0	0	0	0	0.0	0	0	4	2	0	0	0	6	6.0	0	0	57	7	3	3	0	70	75.4
16:45 - 17:00	0	0	5	0	0	0	0	5	5.0	0	0	37	6	0	1	0	44	45.3	0	0	0	0	0	0	0	0	0.0	0	0	3	1	0	0	0	4	4.0	0	0	55	9	1	4	0	69	74.7
Hourly Total	**0**	**0**	**21**	**1**	**0**	**0**	**0**	**22**	**22.0**	**0**	**1**	**161**	**29**	**3**	**5**	**0**	**199**	**206.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**11**	**4**	**0**	**0**	**0**	**15**	**15.0**	**0**	**0**	**217**	**34**	**10**	**16**	**0**	**277**	**302.8**
17:00 - 17:15	0	0	4	2	0	0	0	6	6.0	0	1	31	7	1	1	0	41	42.2	0	0	0	0	0	0	0	0	0.0	0	0	4	0	0	0	0	4	4.0	0	0	74	8	4	3	0	89	94.9
17:15 - 17:30	0	1	4	0	0	0	0	5	4.4	0	1	41	7	0	2	0	51	53.0	0	0	0	0	0	0	0	0	0.0	0	0	3	1	0	0	0	4	4.0	0	0	63	10	0	2	0	75	77.6
17:30 - 17:45	0	0	5	0	0	0	0	5	5.0	0	0	50	7	0	1	0	58	59.3	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	0	2	95	4	1	2	0	104	105.9
17:45 - 18:00	0	0	4	0	0	0	0	4	4.0	0	0	36	6	0	1	0	43	44.3	0	0	0	0	0	0	0	0	0.0	0	0	3	1	0	0	0	4	4.0	0	0	85	6	3	3	0	97	102.4
Hourly Total	**0**	**1**	**17**	**2**	**0**	**0**	**0**	**20**	**19.4**	**0**	**2**	**158**	**27**	**1**	**5**	**0**	**193**	**198.8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**12**	**2**	**0**	**0**	**0**	**14**	**14.0**	**0**	**2**	**317**	**28**	**8**	**10**	**0**	**365**	**380.8**
18:00 - 18:15	0	0	6	1	0	0	0	7	7.0	0	0	43	4	0	2	0	49	51.6	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	0	3	67	4	0	2	0	76	76.8
18:15 - 18:30	0	0	3	0	0	0	0	3	3.0	0	0	25	2	2	0	0	29	30.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	2	62	4	0	0	0	68	66.8
18:30 - 18:45	0	0	5	0	0	0	0	5	5.0	0	2	31	1	0	1	0	35	35.1	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	0	0	58	3	0	3	0	64	67.9
18:45 - 19:00	0	0	6	0	0	0	0	6	6.0	0	1	18	2	0	0	0	21	20.4	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	49	2	0	0	0	51	51.0
Hourly Total	**0**	**0**	**20**	**1**	**0**	**0**	**0**	**21**	**21.0**	**0**	**3**	**117**	**9**	**2**	**3**	**0**	**134**	**137.1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**6**	**6.0**	**0**	**5**	**236**	**13**	**0**	**5**	**0**	**259**	**262.5**
TOTAL	**0**	**1**	**58**	**4**	**0**	**0**	**0**	**63**	**62.4**	**0**	**6**	**436**	**65**	**6**	**13**	**0**	**526**	**542.3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**29**	**6**	**0**	**0**	**0**	**35**	**35.0**	**0**	**7**	**770**	**75**	**18**	**31**	**0**	**901**	**946.1**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

APPENDIX 13 – M1 Junction 25 Turning Count Results

Road Data Services Ltd

East Midlands Airport
Tuesday 26th September 2023
Junction: 1
Approach: M1 J25 Slip Road North

	To A52 (E)									To Bostocks Lane (E)									To M1 J25 Slip Road (S)									To A52 (W)									To Bostocks Lane (W)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	28	14	1	3	0	46	50.4	0	1	39	7	8	1	0	56	60.7	0	0	0	0	0	0	0	0	0.0	0	0	104	45	8	4	0	161	170.2	0	1	13	6	2	2	0	24	27.0
07:15 - 07:30	0	0	47	19	2	0	0	68	69.0	0	0	50	26	2	2	0	80	83.6	0	0	0	0	0	0	0	0	0.0	0	0	126	37	5	4	0	172	179.7	0	0	29	7	2	2	0	40	43.6
07:30 - 07:45	0	0	59	25	1	1	0	86	87.8	0	2	37	9	5	1	0	54	56.6	0	0	0	0	0	0	0	0	0.0	0	0	121	41	9	2	0	173	180.1	0	0	20	12	1	1	0	34	35.8
07:45 - 08:00	0	0	54	22	2	2	0	80	83.6	0	1	67	20	4	1	0	93	95.7	0	0	0	0	0	0	0	0	0.0	0	1	111	33	5	4	0	154	161.1	0	0	27	4	2	0	0	33	34.0
Hourly Total	**0**	**0**	**188**	**80**	**6**	**6**	**0**	**280**	**290.8**	**0**	**4**	**193**	**62**	**19**	**5**	**0**	**283**	**296.6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**462**	**156**	**27**	**14**	**0**	**660**	**691.1**	**0**	**1**	**89**	**29**	**7**	**5**	**0**	**131**	**140.4**
08:00 - 08:15	0	0	58	18	2	2	0	80	83.6	0	0	66	14	6	0	0	86	89.0	0	0	0	0	0	0	0	0	0.0	0	1	111	28	6	0	0	146	148.4	0	0	28	9	6	0	0	43	46.0
08:15 - 08:30	0	0	73	14	4	3	0	94	99.9	0	1	36	15	1	2	0	55	57.5	0	0	0	0	0	0	0	0	0.0	0	0	98	31	5	2	0	136	141.1	0	0	29	9	1	0	0	39	39.5
08:30 - 08:45	0	1	78	16	4	2	0	101	105.0	0	1	60	19	4	5	0	89	96.9	0	0	0	0	0	0	0	0	0.0	0	0	100	20	5	1	0	126	129.8	0	0	30	5	2	1	0	38	40.3
08:45 - 09:00	0	0	35	7	4	3	0	49	54.9	0	0	22	6	0	0	0	28	28.0	0	0	0	0	0	0	0	0	0.0	0	0	52	17	1	2	0	72	75.1	0	0	17	4	1	4	0	26	31.7
Hourly Total	**0**	**1**	**244**	**55**	**14**	**10**	**0**	**324**	**343.4**	**0**	**2**	**184**	**54**	**11**	**7**	**0**	**258**	**271.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**361**	**96**	**17**	**5**	**0**	**480**	**494.4**	**0**	**0**	**104**	**27**	**10**	**5**	**0**	**146**	**157.5**
09:00 - 09:15	0	0	25	9	4	0	0	38	40.0	0	0	27	12	1	1	0	41	42.8	0	0	0	0	0	0	0	0	0.0	0	0	51	14	2	2	0	69	72.6	0	0	16	6	1	1	0	24	25.8
09:15 - 09:30	0	0	55	10	3	0	0	68	69.5	0	0	32	6	0	0	0	38	38.0	0	0	0	0	0	0	0	0	0.0	0	0	50	18	7	1	0	76	80.8	0	0	21	9	2	1	0	33	35.3
09:30 - 09:45	0	0	42	7	3	0	0	52	53.5	0	0	21	5	0	1	0	27	28.3	0	0	0	0	0	0	0	0	0.0	0	0	63	13	5	7	0	88	99.6	0	0	24	7	3	1	0	35	37.8
09:45 - 10:00	0	0	27	8	3	3	0	41	46.4	0	0	27	13	2	0	0	42	43.0	0	0	0	0	0	0	0	0	0.0	0	0	25	13	6	4	0	48	56.2	0	0	15	5	2	1	0	23	25.3
Hourly Total	**0**	**0**	**149**	**34**	**13**	**3**	**0**	**199**	**209.4**	**0**	**0**	**107**	**36**	**3**	**2**	**0**	**148**	**152.1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**189**	**58**	**20**	**14**	**0**	**281**	**309.2**	**0**	**0**	**76**	**27**	**8**	**4**	**0**	**115**	**124.2**
TOTAL	**0**	**1**	**581**	**169**	**33**	**19**	**0**	**803**	**843.6**	**0**	**6**	**484**	**152**	**33**	**14**	**0**	**689**	**720.1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**2**	**1012**	**310**	**64**	**33**	**0**	**1421**	**1494.7**	**0**	**1**	**269**	**83**	**25**	**14**	**0**	**392**	**422.1**
16:00 - 16:15	0	0	33	17	3	2	0	55	59.1	0	0	40	13	0	0	0	53	53.0	0	0	0	0	0	0	0	0	0.0	0	0	59	19	2	3	1	84	89.9	0	0	16	13	3	0	0	32	33.5
16:15 - 16:30	0	0	49	16	2	1	0	68	70.3	0	0	60	13	2	0	0	75	76.0	0	0	0	0	0	0	0	0	0.0	0	0	63	20	2	6	0	91	99.8	0	0	20	6	2	1	0	29	31.3
16:30 - 16:45	0	2	57	13	2	0	0	74	73.8	0	0	47	11	0	0	0	58	58.0	0	0	0	0	0	0	0	0	0.0	0	0	60	8	1	2	0	71	74.1	0	0	28	15	2	1	0	46	48.3
16:45 - 17:00	0	0	55	4	0	0	0	59	59.0	0	0	41	11	0	0	1	53	54.0	0	0	0	0	0	0	0	0	0.0	0	0	61	18	2	0	0	81	82.0	0	0	27	9	1	0	0	37	37.5
Hourly Total	**0**	**2**	**194**	**50**	**7**	**3**	**0**	**256**	**262.2**	**0**	**0**	**188**	**48**	**2**	**0**	**1**	**239**	**241.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**243**	**65**	**7**	**11**	**1**	**327**	**345.8**	**0**	**0**	**91**	**43**	**8**	**2**	**0**	**144**	**150.6**
17:00 - 17:15	0	1	38	14	3	0	0	56	56.9	0	0	42	15	2	0	0	59	60.0	0	0	0	0	0	0	0	0	0.0	0	0	54	12	2	2	0	70	73.6	0	0	24	12	0	2	0	38	40.6
17:15 - 17:30	0	0	62	5	2	0	0	69	70.0	0	0	67	12	0	0	0	79	79.0	0	0	0	0	0	0	0	0	0.0	0	0	73	7	1	4	0	85	90.7	0	0	32	10	4	2	0	48	52.6
17:30 - 17:45	0	0	57	10	0	1	0	68	69.3	0	0	52	8	0	0	0	60	60.0	0	0	0	0	0	0	0	0	0.0	0	0	45	6	2	2	0	55	58.6	0	0	26	7	2	1	0	36	38.3
17:45 - 18:00	0	1	63	10	1	1	0	76	77.2	0	1	48	8	1	0	0	58	57.9	0	0	0	0	0	0	0	0	0.0	0	0	54	8	1	0	1	64	65.5	0	1	23	4	1	0	0	29	28.9
Hourly Total	**0**	**2**	**220**	**39**	**6**	**2**	**0**	**269**	**273.4**	**0**	**1**	**209**	**43**	**3**	**0**	**0**	**256**	**256.9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**226**	**33**	**6**	**8**	**1**	**274**	**288.4**	**0**	**1**	**105**	**33**	**7**	**5**	**0**	**151**	**160.4**
18:00 - 18:15	0	0	47	6	0	1	0	54	55.3	0	0	39	8	2	0	0	49	50.0	0	0	0	0	0	0	0	0	0.0	0	0	45	9	0	0	0	54	54.0	0	0	25	4	2	2	0	33	36.6
18:15 - 18:30	0	0	41	5	0	0	0	46	46.0	0	0	54	5	3	1	0	63	65.8	0	0	0	0	0	0	0	0	0.0	0	0	41	8	0	2	0	51	53.6	0	0	18	2	0	2	0	22	24.6
18:30 - 18:45	0	0	31	2	0	0	0	33	33.0	0	0	42	3	0	4	0	49	54.2	0	0	0	0	0	0	0	0	0.0	0	0	36	8	2	0	0	46	47.0	0	0	14	3	2	0	0	19	20.0
18:45 - 19:00	0	0	33	5	1	1	0	40	41.8	0	0	32	2	0	7	0	41	50.1	0	0	0	0	0	0	0	0	0.0	0	0	33	6	0	0	0	39	39.0	0	0	16	2	0	0	0	18	18.0
Hourly Total	**0**	**0**	**152**	**18**	**1**	**2**	**0**	**173**	**176.1**	**0**	**0**	**167**	**18**	**5**	**12**	**0**	**202**	**220.1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**155**	**31**	**2**	**2**	**0**	**190**	**193.6**	**0**	**0**	**73**	**11**	**4**	**4**	**0**	**92**	**99.2**
TOTAL	**0**	**4**	**566**	**107**	**14**	**7**	**0**	**698**	**711.7**	**0**	**1**	**564**	**109**	**10**	**12**	**1**	**697**	**718.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**624**	**129**	**15**	**21**	**2**	**791**	**827.8**	**0**	**1**	**269**	**87**	**19**	**11**	**0**	**387**	**410.2**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

East Midlands Airport
Tuesday 26th September 2023
Junction: 1
Approach: A52 East

	To Bostocks Lane (E)									To M1 J25 Slip Road (S)									To A52 (W)									To Bostocks Lane (W)									To M1 J25 Slip Road (N)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	12	3	0	0	0	15	15.0	0	0	123	21	2	2	0	148	151.6	0	0	0	0	0	0	0	0	0.0	0	0	9	2	0	0	1	12	13.0	0	0	40	12	2	1	0	55	57.3
07:15 - 07:30	0	0	35	9	0	0	0	44	44.0	0	1	94	20	2	1	0	118	119.7	0	0	0	0	0	0	0	0	0.0	0	0	16	2	1	1	0	20	21.8	0	0	73	10	5	0	0	88	90.5
07:30 - 07:45	0	0	36	0	0	1	0	37	38.3	0	0	97	20	3	0	1	121	123.5	0	0	0	0	0	0	0	0	0.0	0	0	22	4	1	0	0	27	27.5	0	0	90	15	2	2	0	109	112.6
07:45 - 08:00	0	0	36	5	0	0	0	41	41.0	0	0	99	27	6	3	2	137	145.9	0	0	0	0	0	0	0	0	0.0	0	0	17	2	1	0	0	20	20.5	0	1	59	9	5	0	0	74	75.9
Hourly Total	**0**	**0**	**119**	**17**	**0**	**1**	**0**	**137**	**138.3**	**0**	**1**	**413**	**88**	**13**	**6**	**3**	**524**	**540.7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**64**	**10**	**3**	**1**	**1**	**79**	**82.8**	**0**	**1**	**262**	**46**	**14**	**3**	**0**	**326**	**336.3**
08:00 - 08:15	0	0	40	8	1	0	0	49	49.5	0	2	103	7	3	3	0	118	122.2	0	0	0	0	0	0	0	0	0.0	0	0	12	3	1	0	0	16	16.5	0	0	46	7	3	2	0	58	62.1
08:15 - 08:30	0	0	57	7	1	1	0	66	67.8	0	1	64	12	2	1	0	80	81.7	0	0	0	0	0	0	0	0	0.0	0	0	29	3	1	0	0	33	33.5	0	0	68	9	1	4	0	82	87.7
08:30 - 08:45	0	0	39	2	0	0	0	41	41.0	0	0	69	17	3	3	0	92	97.4	0	0	0	0	0	0	0	0	0.0	0	0	16	5	1	1	0	23	24.8	0	0	48	7	2	1	0	58	60.3
08:45 - 09:00	0	0	29	6	2	1	0	38	40.3	0	0	69	12	5	2	0	88	93.1	0	0	0	0	0	0	0	0	0.0	0	0	27	3	1	1	0	32	33.8	0	0	36	7	1	3	0	47	51.4
Hourly Total	**0**	**0**	**165**	**23**	**4**	**2**	**0**	**194**	**198.6**	**0**	**3**	**305**	**48**	**13**	**9**	**0**	**378**	**394.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**84**	**14**	**4**	**2**	**0**	**104**	**108.6**	**0**	**0**	**198**	**30**	**7**	**10**	**0**	**245**	**261.5**
09:00 - 09:15	0	0	25	2	1	0	0	28	28.5	0	1	46	10	2	6	2	67	77.2	0	0	0	0	0	0	0	0	0.0	0	0	14	3	1	1	0	19	20.8	0	0	39	8	4	1	1	53	57.3
09:15 - 09:30	0	0	20	11	1	0	0	32	32.5	0	0	60	9	4	1	0	74	77.3	0	0	0	0	0	0	0	0	0.0	0	0	13	3	1	1	0	18	19.8	0	0	33	7	3	1	0	44	46.8
09:30 - 09:45	0	0	28	4	0	0	0	32	32.0	0	0	39	10	6	2	0	57	62.6	0	0	0	0	0	0	0	0	0.0	0	0	20	5	1	1	0	27	28.8	0	0	41	7	2	1	1	52	55.3
09:45 - 10:00	0	0	26	5	0	0	0	31	31.0	0	0	38	6	2	2	0	48	51.6	0	0	0	0	0	0	0	0	0.0	0	0	12	2	1	1	0	16	17.8	0	0	18	4	1	1	0	24	25.8
Hourly Total	**0**	**0**	**99**	**22**	**2**	**0**	**0**	**123**	**124.0**	**0**	**1**	**183**	**35**	**14**	**11**	**2**	**246**	**268.7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**59**	**13**	**4**	**4**	**0**	**80**	**87.2**	**0**	**0**	**131**	**26**	**10**	**4**	**2**	**173**	**185.2**
TOTAL	**0**	**0**	**383**	**62**	**6**	**3**	**0**	**454**	**460.9**	**0**	**5**	**901**	**171**	**40**	**26**	**5**	**1148**	**1203.8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**207**	**37**	**11**	**7**	**1**	**263**	**278.6**	**0**	**1**	**591**	**102**	**31**	**17**	**2**	**744**	**783.0**
16:00 - 16:15	0	2	66	13	3	0	0	84	84.3	0	1	87	10	4	0	0	102	103.4	0	0	0	0	0	0	0	0	0.0	0	0	23	5	1	0	0	29	29.5	0	1	51	20	4	0	0	76	77.4
16:15 - 16:30	0	1	84	9	1	0	0	95	94.9	0	0	89	16	3	1	1	110	113.8	0	0	0	0	0	0	0	0	0.0	0	1	17	4	1	1	0	24	25.2	0	0	56	13	2	0	0	71	72.0
16:30 - 16:45	0	0	82	11	2	0	0	95	96.0	0	0	61	14	4	1	0	80	83.3	0	0	0	0	0	0	0	0	0.0	0	0	27	13	1	1	0	42	43.8	0	1	83	20	2	0	0	106	106.4
16:45 - 17:00	0	1	89	9	0	0	0	99	98.4	0	0	76	15	1	1	0	93	94.8	0	0	0	0	0	0	0	0	0.0	0	0	32	5	1	1	0	39	40.8	0	2	92	11	3	0	0	108	108.3
Hourly Total	**0**	**4**	**321**	**42**	**6**	**0**	**0**	**373**	**373.6**	**0**	**1**	**313**	**55**	**12**	**3**	**1**	**385**	**395.3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**99**	**27**	**4**	**3**	**0**	**134**	**139.3**	**0**	**4**	**282**	**64**	**11**	**0**	**0**	**361**	**364.1**
17:00 - 17:15	0	0	88	8	2	0	0	98	99.0	0	0	88	13	2	3	0	106	110.9	0	0	0	0	0	0	0	0	0.0	0	0	29	6	0	1	0	36	37.3	0	0	84	18	3	3	1	109	115.4
17:15 - 17:30	0	0	98	9	1	0	0	108	108.5	0	0	103	14	0	1	0	118	119.3	0	0	0	0	0	0	0	0	0.0	0	0	22	6	0	0	0	28	28.0	0	0	70	11	0	1	0	82	83.3
17:30 - 17:45	0	1	87	10	0	0	0	98	97.4	0	0	79	7	1	1	0	88	89.8	0	0	0	0	0	0	0	0	0.0	0	0	26	4	1	1	0	32	33.8	0	0	60	12	1	0	0	73	73.6
17:45 - 18:00	0	0	97	9	0	0	0	106	106.0	0	0	95	6	0	0	1	102	103.0	0	0	0	0	0	0	0	0	0.0	0	0	28	3	0	0	0	31	31.0	0	0	58	5	0	0	0	63	63.0
Hourly Total	**0**	**1**	**370**	**36**	**3**	**0**	**0**	**410**	**410.9**	**0**	**0**	**365**	**40**	**3**	**5**	**1**	**414**	**423.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**105**	**19**	**1**	**2**	**0**	**127**	**130.1**	**0**	**0**	**272**	**46**	**4**	**4**	**1**	**327**	**335.2**
18:00 - 18:15	0	1	75	11	1	0	1	89	89.9	0	0	48	6	2	2	0	58	61.6	0	0	0	0	0	0	0	0	0.0	0	0	24	2	1	1	0	28	29.8	0	0	47	3	3	2	0	55	59.1
18:15 - 18:30	0	0	79	6	1	0	0	86	86.5	0	0	41	5	2	3	0	51	55.9	0	0	0	0	0	0	0	0	0.0	0	0	17	2	0	2	0	21	23.6	0	0	32	2	0	2	0	36	38.6
18:30 - 18:45	0	0	48	5	0	0	0	53	53.0	0	0	51	4	0	0	0	55	55.0	0	0	0	0	0	0	0	0	0.0	0	1	21	4	0	0	0	26	25.4	0	0	34	4	0	0	0	38	38.0
18:45 - 19:00	0	0	62	3	1	0	1	67	68.5	0	0	35	4	0	3	0	42	45.9	0	0	0	0	0	0	0	0	0.0	0	0	17	3	0	0	0	20	20.0	0	0	31	4	0	0	0	35	35.0
Hourly Total	**0**	**1**	**264**	**25**	**3**	**0**	**2**	**295**	**297.9**	**0**	**0**	**175**	**19**	**4**	**8**	**0**	**206**	**218.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**79**	**11**	**1**	**3**	**0**	**95**	**98.8**	**0**	**0**	**144**	**13**	**3**	**4**	**0**	**164**	**170.7**
TOTAL	**0**	**6**	**955**	**103**	**12**	**0**	**2**	**1078**	**1082.4**	**0**	**1**	**853**	**114**	**19**	**16**	**2**	**1005**	**1036.7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**2**	**283**	**57**	**6**	**8**	**0**	**356**	**368.2**	**0**	**4**	**698**	**123**	**18**	**8**	**1**	**852**	**870.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

East Midlands Airport
Tuesday 26th September 2023
Junction: 1
Approach: Bostocks Lane East

	To M1 J25 Slip Road (S)									To A52 (W)									To Bostocks Lane (W)									To M1 J25 Slip Road (N)									To A52 (E)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	43	9	0	2	0	54	56.6	0	0	62	9	2	0	0	73	74.0	0	0	9	2	0	0	0	11	11.0	0	0	38	21	2	0	0	61	62.0	0	0	21	3	0	0	0	24	24.0
07:15 - 07:30	0	0	52	8	3	0	0	63	64.5	0	1	38	8	1	0	0	48	47.9	0	0	8	3	0	0	0	11	11.0	0	0	46	15	1	0	0	62	62.5	0	1	35	1	0	0	0	37	36.4
07:30 - 07:45	0	1	34	8	2	2	0	47	50.0	0	0	49	6	1	0	0	56	56.5	0	0	9	2	0	0	0	11	11.0	0	0	37	7	1	0	0	45	45.5	0	0	35	5	0	0	0	40	40.0
07:45 - 08:00	0	0	54	8	0	1	0	63	64.3	0	1	50	6	1	0	0	58	57.9	0	0	11	2	1	0	0	14	14.5	0	0	41	11	1	0	0	53	53.5	0	0	29	2	1	0	0	32	32.5
Hourly Total	**0**	**1**	**183**	**33**	**5**	**5**	**0**	**227**	**235.4**	**0**	**2**	**199**	**29**	**5**	**0**	**0**	**235**	**236.3**	**0**	**0**	**37**	**9**	**1**	**0**	**0**	**47**	**47.5**	**0**	**0**	**162**	**54**	**5**	**0**	**0**	**221**	**223.5**	**0**	**1**	**120**	**11**	**1**	**0**	**0**	**133**	**132.9**
08:00 - 08:15	0	1	57	7	2	3	0	70	74.3	0	0	45	6	1	0	0	52	52.5	0	0	9	4	1	0	0	14	14.5	0	0	43	10	7	1	0	61	65.8	0	0	25	6	2	1	0	34	36.3
08:15 - 08:30	0	0	39	6	1	1	0	47	48.8	0	0	47	7	0	0	0	54	54.0	0	0	14	2	0	0	0	16	16.0	0	0	33	6	0	0	0	39	39.0	0	0	54	3	0	0	0	57	57.0
08:30 - 08:45	0	0	27	8	3	3	0	41	46.4	0	0	42	7	1	0	0	50	50.5	0	0	12	2	0	0	0	14	14.0	0	0	37	4	1	0	0	42	42.5	0	0	40	4	1	0	0	45	45.5
08:45 - 09:00	0	0	39	6	0	0	0	45	45.0	0	0	53	9	1	1	0	64	65.8	0	0	14	2	1	1	0	18	19.8	0	0	24	3	5	1	3	36	42.8	0	0	51	4	1	1	0	57	58.8
Hourly Total	**0**	**1**	**162**	**27**	**6**	**7**	**0**	**203**	**214.5**	**0**	**0**	**187**	**29**	**3**	**1**	**0**	**220**	**222.8**	**0**	**0**	**49**	**10**	**2**	**1**	**0**	**62**	**64.3**	**0**	**0**	**137**	**23**	**13**	**2**	**3**	**178**	**190.1**	**0**	**0**	**170**	**17**	**4**	**2**	**0**	**193**	**197.6**
09:00 - 09:15	0	0	33	5	2	0	0	40	41.0	0	0	41	7	1	0	0	49	49.5	0	0	14	4	1	0	0	19	19.5	0	0	36	14	4	1	1	56	60.3	0	0	51	3	2	0	0	56	57.0
09:15 - 09:30	0	0	19	4	6	2	0	31	36.6	0	0	43	6	1	0	0	50	50.5	0	0	16	4	0	1	0	21	22.3	0	0	42	13	2	1	3	61	66.3	0	0	40	5	1	0	0	46	46.5
09:30 - 09:45	0	0	16	5	1	3	0	25	29.4	0	0	36	6	2	0	0	44	45.0	0	0	13	3	1	0	0	17	17.5	0	0	27	7	2	0	3	39	43.0	0	0	37	3	1	0	0	41	41.5
09:45 - 10:00	0	0	16	3	0	1	0	20	21.3	0	0	32	9	2	0	0	43	44.0	0	0	16	3	1	0	0	20	20.5	0	0	26	13	2	0	0	41	42.0	0	1	45	5	2	0	0	53	53.4
Hourly Total	**0**	**0**	**84**	**17**	**9**	**6**	**0**	**116**	**128.3**	**0**	**0**	**152**	**28**	**6**	**0**	**0**	**186**	**189.0**	**0**	**0**	**59**	**14**	**3**	**1**	**0**	**77**	**79.8**	**0**	**0**	**131**	**47**	**10**	**2**	**7**	**197**	**211.6**	**0**	**1**	**173**	**16**	**6**	**0**	**0**	**196**	**198.4**
TOTAL	**0**	**2**	**429**	**77**	**20**	**18**	**0**	**546**	**578.2**	**0**	**2**	**538**	**86**	**14**	**1**	**0**	**641**	**648.1**	**0**	**0**	**145**	**33**	**6**	**2**	**0**	**186**	**191.6**	**0**	**0**	**430**	**124**	**28**	**4**	**10**	**596**	**625.2**	**0**	**2**	**463**	**44**	**11**	**2**	**0**	**522**	**528.9**
16:00 - 16:15	0	0	12	8	0	0	0	20	20.0	0	0	44	3	0	0	0	47	47.0	0	0	14	2	1	0	0	17	17.5	0	1	24	7	2	0	0	34	34.4	0	1	22	2	0	0	0	25	24.4
16:15 - 16:30	0	0	10	2	0	1	0	13	14.3	0	0	32	3	0	0	0	35	35.0	0	1	9	2	1	0	0	13	12.9	0	0	32	6	0	0	0	38	38.0	0	0	13	2	1	0	0	16	16.5
16:30 - 16:45	0	0	32	5	0	4	0	41	46.2	0	0	44	3	0	0	0	47	47.0	0	0	19	5	0	0	0	24	24.0	0	2	64	7	2	0	0	75	74.8	0	0	40	4	1	0	0	45	45.5
16:45 - 17:00	0	0	23	1	0	1	0	25	26.3	0	0	40	6	0	0	0	46	46.0	0	0	18	4	0	0	0	22	22.0	0	1	58	11	2	0	0	72	72.4	0	0	39	3	0	0	0	42	42.0
Hourly Total	**0**	**0**	**77**	**16**	**0**	**6**	**0**	**99**	**106.8**	**0**	**0**	**160**	**15**	**0**	**0**	**0**	**175**	**175.0**	**0**	**1**	**60**	**13**	**2**	**0**	**0**	**76**	**76.4**	**0**	**4**	**178**	**31**	**6**	**0**	**0**	**219**	**219.6**	**0**	**1**	**114**	**11**	**2**	**0**	**0**	**128**	**128.4**
17:00 - 17:15	0	0	48	6	0	1	0	55	56.3	0	0	49	3	0	0	0	52	52.0	0	0	18	3	0	0	0	21	21.0	0	0	57	8	1	0	0	66	66.5	0	0	38	3	1	0	0	42	42.5
17:15 - 17:30	0	0	39	7	1	0	0	47	47.5	0	0	46	2	0	0	0	48	48.0	0	0	19	3	0	0	0	22	22.0	0	0	70	5	0	0	0	75	75.0	0	0	45	7	0	0	0	52	52.0
17:30 - 17:45	0	0	29	4	0	1	0	34	35.3	0	2	49	5	0	0	0	56	54.8	0	0	29	5	1	0	0	35	35.5	0	0	65	12	1	0	0	78	78.5	0	1	53	5	0	0	0	59	58.4
17:45 - 18:00	0	0	24	2	0	0	1	27	28.0	0	0	48	6	0	0	1	55	56.0	0	0	22	2	0	0	0	24	24.0	0	0	44	3	0	0	1	48	49.0	0	0	39	2	0	0	2	43	45.0
Hourly Total	**0**	**0**	**140**	**19**	**1**	**2**	**1**	**163**	**167.1**	**0**	**2**	**192**	**16**	**0**	**0**	**1**	**211**	**210.8**	**0**	**0**	**88**	**13**	**1**	**0**	**0**	**102**	**102.5**	**0**	**0**	**236**	**28**	**2**	**0**	**1**	**267**	**269.0**	**0**	**1**	**175**	**17**	**1**	**0**	**2**	**196**	**197.9**
18:00 - 18:15	0	0	20	3	0	2	0	25	27.6	0	0	34	3	0	0	0	37	37.0	0	0	19	3	1	0	0	23	23.5	0	0	35	10	1	0	0	46	46.5	0	0	34	3	0	0	0	37	37.0
18:15 - 18:30	0	0	15	3	0	0	0	18	18.0	0	0	39	4	0	0	0	43	43.0	0	1	15	2	0	0	0	18	17.4	0	0	29	2	0	0	0	31	31.0	0	0	31	2	0	0	0	33	33.0
18:30 - 18:45	0	0	19	1	2	0	0	22	23.0	0	0	33	6	0	0	1	40	41.0	0	1	14	3	0	0	0	18	17.4	0	0	19	3	0	0	0	22	22.0	0	1	44	4	0	0	0	49	48.4
18:45 - 19:00	0	0	13	3	0	2	0	18	20.6	0	0	30	4	0	0	0	34	34.0	0	0	15	2	0	0	0	17	17.0	0	0	27	2	0	0	0	29	29.0	0	0	35	1	0	0	0	36	36.0
Hourly Total	**0**	**0**	**67**	**10**	**2**	**4**	**0**	**83**	**89.2**	**0**	**0**	**136**	**17**	**0**	**0**	**1**	**154**	**155.0**	**0**	**2**	**63**	**10**	**1**	**0**	**0**	**76**	**75.3**	**0**	**0**	**110**	**17**	**1**	**0**	**0**	**128**	**128.5**	**0**	**1**	**144**	**10**	**0**	**0**	**0**	**155**	**154.4**
TOTAL	**0**	**0**	**284**	**45**	**3**	**12**	**1**	**345**	**363.1**	**0**	**2**	**488**	**48**	**0**	**0**	**2**	**540**	**540.8**	**0**	**3**	**211**	**36**	**4**	**0**	**0**	**254**	**254.2**	**0**	**4**	**524**	**76**	**9**	**0**	**1**	**614**	**617.1**	**0**	**3**	**433**	**38**	**3**	**0**	**2**	**479**	**480.7**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

East Midlands Airport
Tuesday 26th September 2023
Junction: 1
Approach: M1 J25 Slip Road South

	To A52 (W)									To Bostocks Lane (W)										To M1 J25 Slip Road (N)										To A52 (E)										To Bostocks Lane (E)									
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	36	14	4	4	0	58	65.2	0	0	15	6	0	2	0	23	25.6	0	0	0	0	0	0	0	0	0.0	0	0	51	10	2	4	0	67	73.2	0	0	11	5	3	1	0	20	22.8
07:15 - 07:30	0	0	48	15	0	4	0	67	72.2	0	0	15	13	2	4	0	34	40.2	0	0	0	0	0	0	0	0	0.0	0	0	62	12	3	1	0	78	80.8	0	0	27	4	2	1	0	34	36.3
07:30 - 07:45	0	0	50	16	2	5	0	73	80.5	0	0	18	11	5	4	0	38	45.7	0	0	0	0	0	0	0	0	0.0	0	0	64	18	5	6	0	93	103.3	0	0	41	7	4	2	0	54	58.6
07:45 - 08:00	0	1	50	18	2	2	0	73	76.0	0	0	31	10	2	7	0	50	60.1	0	0	0	0	0	0	0	0	0.0	0	0	83	17	7	2	1	110	117.1	0	0	40	4	3	2	0	49	53.1
Hourly Total	**0**	**1**	**184**	**63**	**8**	**15**	**0**	**271**	**293.9**	**0**	**0**	**79**	**40**	**9**	**17**	**0**	**145**	**171.6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**260**	**57**	**17**	**13**	**1**	**348**	**374.4**	**0**	**0**	**119**	**20**	**12**	**6**	**0**	**157**	**170.8**
08:00 - 08:15	0	0	62	11	6	2	0	81	86.6	0	0	32	10	4	1	0	47	50.3	0	0	0	0	0	0	0	0	0.0	0	0	80	24	3	8	0	115	126.9	0	0	33	6	2	4	0	45	51.2
08:15 - 08:30	0	0	56	5	0	3	0	64	67.9	0	0	25	11	2	1	0	39	41.3	0	0	0	0	0	0	0	0	0.0	0	0	75	18	2	5	0	100	107.5	0	0	39	10	2	1	0	52	54.3
08:30 - 08:45	0	0	36	7	3	2	0	48	52.1	0	0	17	7	2	1	0	27	29.3	0	0	0	0	0	0	0	0	0.0	0	0	65	14	5	2	0	86	91.1	0	0	31	4	4	2	0	41	45.6
08:45 - 09:00	0	0	30	3	2	4	0	39	45.2	0	0	22	6	3	2	0	33	37.1	0	0	0	0	0	0	0	0	0.0	0	0	79	6	6	8	0	99	112.4	0	0	16	7	3	0	0	26	27.5
Hourly Total	**0**	**0**	**184**	**26**	**11**	**11**	**0**	**232**	**251.8**	**0**	**0**	**96**	**34**	**11**	**5**	**0**	**146**	**158.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**299**	**62**	**16**	**23**	**0**	**400**	**437.9**	**0**	**0**	**119**	**27**	**11**	**7**	**0**	**164**	**178.6**
09:00 - 09:15	0	0	34	3	2	1	0	40	42.3	0	0	13	13	2	3	0	31	35.9	0	0	0	0	0	0	0	0	0.0	0	0	51	11	5	1	0	68	71.8	0	0	23	4	1	3	0	31	35.4
09:15 - 09:30	0	0	27	4	1	3	0	35	39.4	0	0	16	8	2	7	0	33	43.1	0	0	0	0	0	0	0	0	0.0	0	0	47	15	5	3	0	70	76.4	0	0	16	4	2	0	0	22	23.0
09:30 - 09:45	0	0	27	7	2	4	0	40	46.2	0	0	18	12	7	3	0	40	47.4	0	0	0	0	0	0	0	0	0.0	0	0	51	9	3	8	0	71	82.9	0	0	22	9	3	2	0	36	40.1
09:45 - 10:00	0	0	19	4	3	1	0	27	29.8	0	0	17	10	1	4	0	32	37.7	0	0	0	0	0	0	0	0	0.0	0	0	45	13	4	6	0	68	77.8	0	0	15	4	2	1	0	22	24.3
Hourly Total	**0**	**0**	**107**	**18**	**8**	**9**	**0**	**142**	**157.7**	**0**	**0**	**64**	**43**	**12**	**17**	**0**	**136**	**164.1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**194**	**48**	**17**	**18**	**0**	**277**	**308.9**	**0**	**0**	**76**	**21**	**8**	**6**	**0**	**111**	**122.8**
TOTAL	**0**	**1**	**475**	**107**	**27**	**35**	**0**	**645**	**703.4**	**0**	**0**	**239**	**117**	**32**	**39**	**0**	**427**	**493.7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**753**	**167**	**50**	**54**	**1**	**1025**	**1121.2**	**0**	**0**	**314**	**68**	**31**	**19**	**0**	**432**	**472.2**
16:00 - 16:15	0	0	32	11	3	2	0	48	52.1	0	0	47	18	1	5	0	71	78.0	0	0	0	0	0	0	0	0	0.0	0	0	88	18	4	0	1	111	114.0	0	0	33	9	0	0	0	42	42.0
16:15 - 16:30	0	0	34	4	0	1	0	39	40.3	0	2	56	20	4	7	0	89	98.9	0	0	0	0	0	0	0	0	0.0	0	0	79	21	3	4	0	107	113.7	0	0	38	13	0	0	0	51	51.0
16:30 - 16:45	0	0	27	9	1	2	0	39	42.1	0	0	45	16	3	2	0	66	70.1	0	0	0	0	0	0	0	0	0.0	0	0	98	17	6	2	0	123	128.6	0	0	42	7	0	0	0	49	49.0
16:45 - 17:00	0	0	39	7	0	3	0	49	52.9	0	0	60	15	2	2	0	79	82.6	0	0	0	0	0	0	0	0	0.0	0	0	125	18	2	2	0	147	150.6	0	0	48	5	2	0	0	55	56.0
Hourly Total	**0**	**0**	**132**	**31**	**4**	**8**	**0**	**175**	**187.4**	**0**	**2**	**208**	**69**	**10**	**16**	**0**	**305**	**329.6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**390**	**74**	**15**	**8**	**1**	**488**	**506.9**	**0**	**0**	**161**	**34**	**2**	**0**	**0**	**197**	**198.0**
17:00 - 17:15	0	0	34	2	1	0	0	37	37.5	0	1	51	15	3	2	0	72	75.5	0	0	0	0	0	0	0	0	0.0	0	1	110	15	7	2	1	136	142.5	0	1	52	8	1	0	1	63	63.9
17:15 - 17:30	0	0	30	1	0	1	0	32	33.3	0	0	37	5	1	1	0	44	45.8	0	0	0	0	0	0	0	0	0.0	0	1	87	11	1	0	0	100	99.9	0	0	36	4	0	0	0	40	40.0
17:30 - 17:45	0	0	24	6	1	0	0	31	31.5	0	0	53	10	2	4	0	69	75.2	0	0	0	0	0	0	0	0	0.0	0	0	104	13	2	0	0	119	120.0	0	0	47	5	1	0	0	53	53.5
17:45 - 18:00	0	0	26	1	1	3	0	31	35.4	0	0	73	9	2	2	0	86	89.6	0	0	0	0	0	0	0	0	0.0	0	0	130	11	0	2	0	143	145.6	0	0	50	6	1	0	0	57	57.5
Hourly Total	**0**	**0**	**114**	**10**	**3**	**4**	**0**	**131**	**137.7**	**0**	**1**	**214**	**39**	**8**	**9**	**0**	**271**	**286.1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**2**	**431**	**50**	**10**	**4**	**1**	**498**	**508.0**	**0**	**1**	**185**	**23**	**3**	**0**	**1**	**213**	**214.9**
18:00 - 18:15	0	0	34	3	1	2	0	40	43.1	0	0	64	11	2	5	0	82	89.5	0	0	0	0	0	0	0	0	0.0	0	0	121	12	4	5	0	142	150.5	0	0	50	3	1	1	0	55	56.8
18:15 - 18:30	0	0	31	4	1	0	0	36	36.5	0	0	33	9	5	2	0	49	54.1	0	0	0	0	0	0	0	0	0.0	0	0	80	6	0	3	0	89	92.9	0	0	35	6	0	1	0	42	43.3
18:30 - 18:45	0	0	20	4	0	1	0	25	26.3	0	0	21	3	0	3	0	27	30.9	0	0	0	0	0	0	0	0	0.0	0	0	78	5	1	2	0	86	89.1	0	0	21	3	0	0	0	24	24.0
18:45 - 19:00	0	0	27	5	0	1	1	34	36.3	0	0	26	5	2	0	0	33	34.0	0	0	0	0	0	0	0	0	0.0	0	0	70	2	0	0	0	72	72.0	0	0	30	5	2	0	0	37	38.0
Hourly Total	**0**	**0**	**112**	**16**	**2**	**4**	**1**	**135**	**142.2**	**0**	**0**	**144**	**28**	**9**	**10**	**0**	**191**	**208.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**349**	**25**	**5**	**10**	**0**	**389**	**404.5**	**0**	**0**	**136**	**17**	**3**	**2**	**0**	**158**	**162.1**
TOTAL	**0**	**0**	**358**	**57**	**9**	**16**	**1**	**441**	**467.3**	**0**	**3**	**566**	**136**	**27**	**35**	**0**	**767**	**824.2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**2**	**1170**	**149**	**30**	**22**	**2**	**1375**	**1419.4**	**0**	**1**	**482**	**74**	**8**	**2**	**1**	**568**	**575.0**

PCU Factors:
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

East Midlands Airport
Tuesday 26th September 2023
Junction: 1
Approach: A52 West

	To Bostocks Lane (W)									To M1 J25 Slip Road (N)										To A52 (E)										To Bostocks Lane (E)										To M1 J25 Slip Road (S)									
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	9	4	4	1	0	18	21.3	0	0	61	16	2	3	0	82	86.9	0	0	0	0	0	0	0	0	0.0	0	0	9	2	2	1	0	14	16.3	0	0	43	15	6	2	0	66	71.6
07:15 - 07:30	0	0	21	4	1	1	0	27	28.8	0	0	48	30	2	3	1	84	89.9	0	0	0	0	0	0	0	0	0.0	0	0	19	2	1	1	1	24	26.8	0	0	59	8	3	1	0	71	73.8
07:30 - 07:45	0	0	13	3	4	2	0	22	26.6	0	0	53	12	6	2	0	73	78.6	0	0	0	0	0	0	0	0	0.0	0	0	33	3	1	1	0	38	39.8	0	0	81	12	4	2	0	99	103.6
07:45 - 08:00	0	0	29	9	1	0	0	39	39.5	0	1	79	28	5	5	0	118	126.4	0	0	0	0	0	0	0	0	0.0	0	1	26	2	1	1	0	31	32.2	0	0	57	6	6	1	0	70	74.3
Hourly Total	**0**	**0**	**72**	**20**	**10**	**4**	**0**	**106**	**116.2**	**0**	**1**	**241**	**86**	**15**	**13**	**1**	**357**	**381.8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**87**	**9**	**5**	**4**	**1**	**107**	**115.1**	**0**	**0**	**240**	**41**	**19**	**6**	**0**	**306**	**323.3**
08:00 - 08:15	0	0	29	6	4	0	0	39	41.0	0	0	67	18	6	1	0	92	96.3	0	0	0	0	0	0	0	0	0.0	0	0	19	4	1	1	0	25	26.8	0	0	60	15	3	4	0	82	88.7
08:15 - 08:30	0	0	22	7	3	0	1	33	35.5	0	0	46	11	2	2	0	61	64.6	0	0	0	0	0	0	0	0	0.0	0	0	36	4	1	0	0	41	41.5	0	1	73	20	4	2	0	100	104.0
08:30 - 08:45	0	0	12	1	0	0	0	13	13.0	0	0	46	17	8	2	0	73	79.6	0	0	0	0	0	0	0	0	0.0	0	1	27	6	2	1	0	37	38.7	0	0	64	13	7	2	0	86	92.1
08:45 - 09:00	0	0	19	5	1	2	0	27	30.1	0	0	50	11	4	3	0	68	73.9	0	0	0	0	0	0	0	0	0.0	0	0	17	4	0	0	0	21	21.0	0	0	37	15	3	2	0	57	61.1
Hourly Total	**0**	**0**	**82**	**19**	**8**	**2**	**1**	**112**	**119.6**	**0**	**0**	**209**	**57**	**20**	**8**	**0**	**294**	**314.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**99**	**18**	**4**	**2**	**0**	**124**	**128.0**	**0**	**1**	**234**	**63**	**17**	**10**	**0**	**325**	**345.9**
09:00 - 09:15	0	0	11	4	0	0	0	15	15.0	0	0	35	15	3	7	0	60	70.6	0	0	0	0	0	0	0	0	0.0	0	0	22	3	1	1	0	27	28.8	0	0	43	11	2	4	0	60	66.2
09:15 - 09:30	0	0	11	6	3	2	0	22	26.1	0	0	35	16	3	5	0	59	67.0	0	0	0	0	0	0	0	0	0.0	0	0	14	4	0	0	0	18	18.0	0	0	44	9	4	2	0	59	63.6
09:30 - 09:45	0	1	13	3	4	1	0	22	24.7	0	0	30	9	5	4	0	48	55.7	0	0	0	0	0	0	0	0	0.0	0	0	17	4	0	1	0	22	23.3	0	0	44	7	4	2	0	57	61.6
09:45 - 10:00	0	0	9	6	0	2	0	17	19.6	0	0	24	10	2	0	0	36	37.0	0	0	0	0	0	0	0	0	0.0	0	0	14	3	2	0	0	19	20.0	0	0	24	8	4	0	0	36	38.0
Hourly Total	**0**	**1**	**44**	**19**	**7**	**5**	**0**	**76**	**85.4**	**0**	**0**	**124**	**50**	**13**	**16**	**0**	**203**	**230.3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**67**	**14**	**3**	**2**	**0**	**86**	**90.1**	**0**	**0**	**155**	**35**	**14**	**8**	**0**	**212**	**229.4**
TOTAL	**0**	**1**	**198**	**58**	**25**	**11**	**1**	**294**	**321.2**	**0**	**1**	**574**	**193**	**48**	**37**	**1**	**854**	**926.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**2**	**253**	**41**	**12**	**8**	**1**	**317**	**333.2**	**0**	**1**	**629**	**139**	**50**	**24**	**0**	**843**	**898.6**
16:00 - 16:15	0	0	18	7	1	1	0	27	28.8	0	0	102	42	2	2	0	148	151.6	0	0	0	0	0	0	0	0	0.0	0	0	30	5	0	0	0	35	35.0	0	0	41	9	0	2	0	52	54.6
16:15 - 16:30	0	1	15	0	2	0	0	18	18.4	0	0	116	26	3	2	0	147	151.1	0	0	0	0	0	0	0	0	0.0	0	0	25	4	0	0	0	29	29.0	0	0	53	10	3	4	0	70	76.7
16:30 - 16:45	0	0	17	4	1	1	0	23	24.8	0	0	103	21	2	3	0	129	133.9	0	0	0	0	0	0	0	0	0.0	0	0	27	7	0	0	0	34	34.0	0	0	46	9	2	4	0	61	67.2
16:45 - 17:00	0	0	30	4	1	1	0	36	37.8	0	1	113	13	5	2	0	134	138.5	0	0	0	0	0	0	0	0	0.0	0	1	25	3	0	0	0	29	28.4	0	0	47	5	1	3	0	56	60.4
Hourly Total	**0**	**1**	**80**	**15**	**5**	**3**	**0**	**104**	**109.8**	**0**	**1**	**434**	**102**	**12**	**9**	**0**	**558**	**575.1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**107**	**19**	**0**	**0**	**0**	**127**	**126.4**	**0**	**0**	**187**	**33**	**6**	**13**	**0**	**239**	**258.9**
17:00 - 17:15	0	0	26	3	1	0	0	30	30.5	0	0	98	22	3	2	0	125	129.1	0	0	0	0	0	0	0	0	0.0	0	1	33	5	1	0	0	40	39.9	0	0	59	8	1	2	0	70	73.1
17:15 - 17:30	0	0	20	2	0	0	0	22	22.0	0	0	114	12	1	1	0	128	129.8	0	0	0	0	0	0	0	0	0.0	0	0	31	4	0	0	0	35	35.0	0	0	73	8	1	1	0	83	84.8
17:30 - 17:45	0	0	21	4	2	1	0	28	30.3	0	0	113	13	1	0	0	127	127.5	0	0	0	0	0	0	0	0	0.0	0	0	35	4	0	0	0	39	39.0	0	0	64	5	1	0	0	70	70.5
17:45 - 18:00	0	0	32	2	2	0	0	36	37.0	0	0	96	15	2	3	0	116	120.9	0	0	0	0	0	0	0	0	0.0	0	0	30	3	1	0	0	34	34.5	0	0	58	6	1	3	2	70	76.4
Hourly Total	**0**	**0**	**99**	**11**	**5**	**1**	**0**	**116**	**119.8**	**0**	**0**	**421**	**62**	**7**	**6**	**0**	**496**	**507.3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**129**	**16**	**2**	**0**	**0**	**148**	**148.4**	**0**	**0**	**254**	**27**	**4**	**6**	**2**	**293**	**304.8**
18:00 - 18:15	0	0	17	0	1	0	0	18	18.5	0	0	112	18	2	3	0	135	139.9	0	0	0	0	0	0	0	0	0.0	0	0	38	2	1	1	0	42	43.8	0	0	49	4	1	1	0	55	56.8
18:15 - 18:30	0	0	19	0	0	0	0	19	19.0	0	0	63	7	0	0	0	70	70.0	0	0	0	0	0	0	0	0	0.0	0	0	35	2	0	0	0	37	37.0	0	0	32	4	0	0	0	36	36.0
18:30 - 18:45	0	0	21	5	0	0	0	26	26.0	0	0	58	3	4	2	0	67	71.6	0	0	0	0	0	0	0	0	0.0	0	0	38	3	0	0	0	41	41.0	0	0	29	4	2	0	0	35	36.0
18:45 - 19:00	0	0	12	2	0	0	0	14	14.0	0	0	54	10	0	0	0	64	64.0	0	0	0	0	0	0	0	0	0.0	0	0	27	3	0	0	0	30	30.0	0	0	26	3	0	0	0	29	29.0
Hourly Total	**0**	**0**	**69**	**7**	**1**	**0**	**0**	**77**	**77.5**	**0**	**0**	**287**	**38**	**6**	**5**	**0**	**336**	**345.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**138**	**10**	**1**	**1**	**0**	**150**	**151.8**	**0**	**0**	**136**	**15**	**3**	**1**	**0**	**155**	**157.8**
TOTAL	**0**	**1**	**248**	**33**	**11**	**4**	**0**	**297**	**307.1**	**0**	**1**	**1142**	**202**	**25**	**20**	**0**	**1390**	**1427.9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**2**	**374**	**45**	**3**	**1**	**0**	**425**	**426.6**	**0**	**0**	**577**	**75**	**13**	**20**	**2**	**687**	**721.5**

PCU Factors:
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

East Midlands Airport
Tuesday 26th September 2023
Junction: 1
Approach: Bostocks Lane West

	To M1 J25 Slip Road (N)									To A52 (E)									To Bostocks Lane (E)									To M1 J25 Slip Road (S)									To A52 (W)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	26	9	1	0	0	36	36.5	0	0	31	3	2	1	0	37	39.3	0	0	6	3	2	0	0	11	12.0	0	0	37	24	7	2	0	70	76.1	0	0	16	7	2	2	0	27	30.6
07:15 - 07:30	0	0	34	12	1	0	0	47	47.5	0	0	24	5	1	2	0	32	35.1	0	0	12	3	1	1	0	17	18.8	0	0	41	19	4	3	0	67	72.9	0	0	26	5	2	1	0	34	36.3
07:30 - 07:45	0	0	35	8	3	1	0	47	49.8	0	0	23	6	1	1	0	31	32.8	0	0	14	2	1	0	0	17	17.5	0	0	32	14	1	1	0	48	49.8	0	0	41	9	1	2	0	53	56.1
07:45 - 08:00	0	0	48	9	2	3	0	62	66.9	0	0	29	4	3	1	0	37	39.8	0	0	15	3	2	0	0	20	21.0	0	0	42	17	6	2	0	67	72.6	0	0	36	4	3	0	0	43	44.5
Hourly Total	**0**	**0**	**143**	**38**	**7**	**4**	**0**	**192**	**200.7**	**0**	**0**	**107**	**18**	**7**	**5**	**0**	**137**	**147.0**	**0**	**0**	**47**	**11**	**6**	**1**	**0**	**65**	**69.3**	**0**	**0**	**152**	**74**	**18**	**8**	**0**	**252**	**271.4**	**0**	**0**	**119**	**25**	**8**	**5**	**0**	**157**	**167.5**
08:00 - 08:15	0	0	35	7	2	1	0	45	47.3	0	0	36	6	2	0	0	44	45.0	0	0	15	3	1	0	0	19	19.5	0	1	61	11	6	0	0	79	81.4	0	0	29	6	1	0	1	37	38.5
08:15 - 08:30	0	0	37	6	3	0	0	46	47.5	0	0	30	5	1	1	2	39	42.8	0	0	17	4	1	0	0	22	22.5	0	0	32	12	6	7	0	57	69.1	0	0	43	7	2	0	0	52	53.0
08:30 - 08:45	0	0	34	5	5	1	0	45	48.8	0	0	31	5	2	1	0	39	41.3	0	0	16	4	2	1	0	23	25.3	0	0	38	9	8	2	0	57	63.6	0	0	27	8	2	1	1	39	42.3
08:45 - 09:00	0	0	4	2	2	0	0	8	9.0	0	0	17	1	1	1	0	20	21.8	0	0	19	1	0	0	0	20	20.0	0	0	27	8	2	3	0	40	44.9	0	0	22	3	1	1	0	27	28.8
Hourly Total	**0**	**0**	**110**	**20**	**12**	**2**	**0**	**144**	**152.6**	**0**	**0**	**114**	**17**	**6**	**3**	**2**	**142**	**150.9**	**0**	**0**	**67**	**12**	**4**	**1**	**0**	**84**	**87.3**	**0**	**1**	**158**	**40**	**22**	**12**	**0**	**233**	**259.0**	**0**	**0**	**121**	**24**	**6**	**2**	**2**	**155**	**162.6**
09:00 - 09:15	0	0	24	4	2	2	0	32	35.6	0	0	21	3	3	1	0	28	30.8	0	0	10	2	1	1	0	14	15.8	0	0	19	12	3	4	0	38	44.7	0	0	19	4	2	2	0	27	30.6
09:15 - 09:30	0	0	21	7	1	0	0	29	29.5	0	0	11	3	1	0	0	15	15.5	0	0	5	1	0	0	0	6	6.0	0	0	14	5	1	0	0	20	20.6	0	0	17	3	1	0	0	21	21.5
09:30 - 09:45	0	0	10	4	3	1	0	18	20.8	0	0	18	4	1	0	0	23	23.5	0	0	8	3	0	0	0	11	11.0	0	0	15	5	4	1	0	25	28.3	0	0	22	5	2	1	0	30	32.3
09:45 - 10:00	0	0	9	5	5	2	0	21	26.1	0	0	20	3	1	2	0	26	29.1	0	0	12	2	1	0	0	15	15.5	0	0	16	11	1	4	0	32	37.7	0	0	11	3	1	1	0	16	17.8
Hourly Total	**0**	**0**	**64**	**20**	**11**	**5**	**0**	**100**	**112.0**	**0**	**0**	**70**	**13**	**6**	**3**	**0**	**92**	**98.9**	**0**	**0**	**35**	**8**	**2**	**1**	**0**	**46**	**48.3**	**0**	**0**	**64**	**33**	**9**	**9**	**0**	**115**	**131.2**	**0**	**0**	**69**	**15**	**6**	**4**	**0**	**94**	**102.2**
TOTAL	**0**	**0**	**317**	**78**	**30**	**11**	**0**	**436**	**465.3**	**0**	**0**	**291**	**48**	**19**	**11**	**2**	**371**	**396.8**	**0**	**0**	**149**	**31**	**12**	**3**	**0**	**195**	**204.9**	**0**	**1**	**374**	**147**	**49**	**29**	**0**	**600**	**661.6**	**0**	**0**	**309**	**64**	**20**	**11**	**2**	**406**	**432.3**
16:00 - 16:15	0	0	33	10	1	0	0	44	44.5	0	0	32	6	2	0	0	40	41.0	0	0	13	4	0	0	0	17	17.0	0	0	19	8	3	0	0	30	31.5	0	0	20	4	0	0	0	24	24.0
16:15 - 16:30	0	0	28	5	0	0	0	33	33.0	0	0	32	3	2	0	0	37	38.0	0	1	16	3	0	0	0	20	19.4	0	0	28	10	4	0	0	42	44.0	0	0	16	4	0	0	0	20	20.0
16:30 - 16:45	0	0	31	5	1	1	0	38	39.8	0	0	25	8	1	0	0	34	34.5	0	0	12	3	0	0	0	15	15.0	0	0	22	4	2	1	0	29	31.3	0	0	20	4	1	2	0	27	30.1
16:45 - 17:00	0	0	38	8	1	0	0	47	47.5	0	0	28	2	0	1	0	31	32.3	0	0	10	2	0	0	0	12	12.0	0	0	21	4	1	3	0	29	33.4	0	0	16	2	1	1	0	20	21.8
Hourly Total	**0**	**0**	**130**	**28**	**3**	**1**	**0**	**162**	**164.8**	**0**	**0**	**117**	**19**	**5**	**1**	**0**	**142**	**145.8**	**0**	**1**	**51**	**12**	**0**	**0**	**0**	**64**	**63.4**	**0**	**0**	**90**	**26**	**10**	**4**	**0**	**130**	**140.2**	**0**	**0**	**72**	**14**	**2**	**3**	**0**	**91**	**95.9**
17:00 - 17:15	0	0	56	12	1	1	0	70	71.8	0	0	24	5	0	0	0	29	29.0	0	0	11	2	0	0	1	14	15.0	0	0	24	5	0	2	0	31	33.6	0	0	19	3	0	0	0	22	22.0
17:15 - 17:30	0	0	42	8	0	1	0	51	52.3	0	0	25	7	0	0	0	32	32.0	0	0	10	2	0	0	0	12	12.0	0	0	25	4	0	1	0	30	31.3	0	0	13	2	0	1	0	16	17.3
17:30 - 17:45	0	0	26	3	2	0	0	31	32.0	0	0	28	3	0	0	0	31	31.0	0	0	14	2	0	0	0	16	16.0	0	0	23	5	0	0	0	28	28.0	0	0	15	2	0	0	0	17	17.0
17:45 - 18:00	0	0	24	4	0	1	0	29	30.3	0	0	21	2	0	0	0	23	23.0	0	0	8	2	0	0	0	10	10.0	0	0	17	1	2	0	0	20	21.0	0	0	14	2	0	0	0	16	16.0
Hourly Total	**0**	**0**	**148**	**27**	**3**	**3**	**0**	**181**	**186.4**	**0**	**0**	**98**	**17**	**0**	**0**	**0**	**115**	**115.0**	**0**	**0**	**43**	**8**	**0**	**0**	**1**	**52**	**53.0**	**0**	**0**	**89**	**15**	**2**	**3**	**0**	**109**	**113.9**	**0**	**0**	**61**	**9**	**0**	**1**	**0**	**71**	**72.3**
18:00 - 18:15	0	0	25	3	1	1	0	30	31.8	0	0	24	4	0	0	0	28	28.0	0	0	16	1	0	0	0	17	17.0	0	0	19	5	0	0	0	24	24.0	0	0	19	1	0	0	0	20	20.0
18:15 - 18:30	0	0	22	2	1	1	0	26	27.8	0	0	28	2	0	0	0	30	30.0	0	1	13	2	0	0	0	16	15.4	0	0	16	2	0	0	0	18	18.0	0	0	14	2	0	0	0	16	16.0
18:30 - 18:45	0	0	13	1	0	0	0	14	14.0	0	1	32	2	0	0	0	35	34.4	0	0	11	2	0	0	0	13	13.0	0	0	9	2	0	0	0	11	11.0	0	0	12	3	0	0	0	15	15.0
18:45 - 19:00	0	0	10	0	0	0	0	10	10.0	0	0	23	1	0	0	0	24	24.0	0	0	12	1	0	0	0	13	13.0	0	0	13	1	0	0	0	14	14.0	0	0	14	2	0	0	0	16	16.0
Hourly Total	**0**	**0**	**70**	**6**	**2**	**2**	**0**	**80**	**83.6**	**0**	**1**	**107**	**9**	**0**	**0**	**0**	**117**	**116.4**	**0**	**1**	**52**	**6**	**0**	**0**	**0**	**59**	**58.4**	**0**	**0**	**57**	**10**	**0**	**0**	**0**	**67**	**67.0**	**0**	**0**	**59**	**8**	**0**	**0**	**0**	**67**	**67.0**
TOTAL	**0**	**0**	**348**	**61**	**8**	**6**	**0**	**423**	**434.8**	**0**	**1**	**322**	**45**	**5**	**1**	**0**	**374**	**377.2**	**0**	**2**	**146**	**26**	**0**	**0**	**1**	**175**	**174.8**	**0**	**0**	**236**	**51**	**12**	**7**	**0**	**306**	**321.1**	**0**	**0**	**192**	**31**	**2**	**4**	**0**	**229**	**235.2**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

APPENDIX 14 – Station Road/Broad Rushes Roundabout Junction Turning Count Results

Road Data Services Ltd

East Midlands Airport
Wednesday 27th September 2023
Junction: 2
Approach: Station Road North

	Ahead to Station Road (S)									Right to Broad Rushes								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	1	50	23	3	1	2	80	84.2	0	0	44	13	6	4	0	67	75.2
07:15 - 07:30	0	0	85	19	4	1	3	112	118.3	0	1	67	7	4	11	0	90	105.7
07:30 - 07:45	0	2	102	24	6	0	1	135	137.8	0	0	78	11	2	4	0	95	101.2
07:45 - 08:00	1	2	120	13	9	3	4	152	162.4	0	0	98	11	5	7	0	121	132.6
Hourly Total	**1**	**5**	**357**	**79**	**22**	**5**	**10**	**479**	**502.7**	**0**	**1**	**287**	**42**	**17**	**26**	**0**	**373**	**414.7**
08:00 - 08:15	2	2	106	25	4	4	2	145	151.4	0	1	80	17	6	5	0	109	117.9
08:15 - 08:30	0	0	135	15	3	1	3	157	162.8	0	0	111	11	5	7	0	134	145.6
08:30 - 08:45	0	0	103	20	4	1	0	128	131.3	0	1	91	15	7	8	0	122	135.3
08:45 - 09:00	0	1	85	23	2	1	3	115	119.7	0	1	96	12	5	11	0	125	141.2
Hourly Total	**2**	**3**	**429**	**83**	**13**	**7**	**8**	**545**	**565.2**	**0**	**3**	**378**	**55**	**23**	**31**	**0**	**490**	**540.0**
09:00 - 09:15	0	3	74	20	3	2	2	104	108.3	0	2	47	12	6	9	0	76	89.5
09:15 - 09:30	0	1	76	19	2	1	3	102	106.7	0	0	28	10	4	8	0	50	62.4
09:30 - 09:45	0	0	67	19	6	4	0	96	104.2	0	0	35	6	5	12	0	58	76.1
09:45 - 10:00	0	1	73	12	4	0	3	93	97.4	0	2	39	5	6	10	0	62	76.8
Hourly Total	**0**	**5**	**290**	**70**	**15**	**7**	**8**	**395**	**416.6**	**0**	**4**	**149**	**33**	**21**	**39**	**0**	**246**	**304.8**
TOTAL	**3**	**13**	**1076**	**232**	**50**	**19**	**26**	**1419**	**1484.5**	**0**	**8**	**814**	**130**	**61**	**96**	**0**	**1109**	**1259.5**
16:00 - 16:15	0	0	95	12	5	1	2	115	120.8	0	0	36	15	5	5	0	61	70.0
16:15 - 16:30	0	0	97	12	4	1	1	115	119.3	0	0	46	7	2	7	0	62	72.1
16:30 - 16:45	0	1	91	11	5	1	2	111	116.2	0	3	50	16	0	9	0	78	87.9
16:45 - 17:00	0	2	104	13	1	2	3	125	129.9	0	0	60	7	2	8	0	77	88.4
Hourly Total	**0**	**3**	**387**	**48**	**15**	**5**	**8**	**466**	**486.2**	**0**	**3**	**192**	**45**	**9**	**29**	**0**	**278**	**318.4**
17:00 - 17:15	0	0	112	14	1	0	1	128	129.5	0	0	70	11	2	5	0	88	95.5
17:15 - 17:30	0	0	189	7	0	0	3	199	202.0	0	3	80	4	2	3	0	92	95.1
17:30 - 17:45	0	2	99	6	1	1	1	110	111.6	0	0	119	5	1	4	0	129	134.7
17:45 - 18:00	0	2	86	10	1	0	3	102	104.3	0	1	95	8	1	4	0	109	114.1
Hourly Total	**0**	**4**	**486**	**37**	**3**	**1**	**8**	**539**	**547.4**	**0**	**4**	**364**	**28**	**6**	**16**	**0**	**418**	**439.4**
18:00 - 18:15	0	4	80	7	0	0	1	92	90.6	0	1	85	3	3	2	0	94	97.5
18:15 - 18:30	0	1	74	9	3	0	3	90	93.9	0	0	57	9	1	4	0	71	76.7
18:30 - 18:45	0	0	103	6	1	0	1	111	112.5	0	0	49	4	0	11	0	64	78.3
18:45 - 19:00	0	0	68	6	1	1	1	77	79.8	0	0	32	4	0	2	0	38	40.6
Hourly Total	**0**	**5**	**325**	**28**	**5**	**1**	**6**	**370**	**376.8**	**0**	**1**	**223**	**20**	**4**	**19**	**0**	**267**	**293.1**
TOTAL	**0**	**12**	**1198**	**113**	**23**	**7**	**22**	**1375**	**1410.4**	**0**	**8**	**779**	**93**	**19**	**64**	**0**	**963**	**1050.9**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Wednesday 27th September 2023
Junction: 2
Approach: Station Road South

	Left to Broad Rushes									Ahead to Station Road (N)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	2	1	0	0	0	3	3.0	0	0	40	10	2	3	0	55	59.9
07:15 - 07:30	0	0	2	1	0	0	0	3	3.0	0	0	33	13	4	0	2	52	56.0
07:30 - 07:45	0	0	4	0	0	0	0	4	4.0	0	0	73	14	3	0	2	92	95.5
07:45 - 08:00	0	0	2	2	0	0	0	4	4.0	0	0	53	15	4	0	1	73	76.0
Hourly Total	**0**	**0**	**10**	**4**	**0**	**0**	**0**	**14**	**14.0**	**0**	**0**	**199**	**52**	**13**	**3**	**5**	**272**	**287.4**
08:00 - 08:15	0	0	5	1	0	0	0	6	6.0	0	1	51	10	4	0	4	70	75.4
08:15 - 08:30	0	0	5	1	0	1	0	7	8.3	0	0	64	12	8	2	0	86	92.6
08:30 - 08:45	0	0	6	1	0	0	0	7	7.0	0	0	51	10	4	3	2	70	77.9
08:45 - 09:00	0	0	4	2	0	0	0	6	6.0	0	0	64	16	6	1	3	90	97.3
Hourly Total	**0**	**0**	**20**	**5**	**0**	**1**	**0**	**26**	**27.3**	**0**	**1**	**230**	**48**	**22**	**6**	**9**	**316**	**343.2**
09:00 - 09:15	0	0	2	0	0	0	0	2	2.0	0	0	51	13	2	2	1	69	73.6
09:15 - 09:30	0	0	0	1	0	0	0	1	1.0	5	0	56	19	3	4	2	89	93.7
09:30 - 09:45	0	0	0	0	0	0	0	0	0.0	0	1	56	17	2	0	4	80	84.4
09:45 - 10:00	0	0	2	2	0	0	0	4	4.0	0	0	59	11	6	0	0	76	79.0
Hourly Total	**0**	**0**	**4**	**3**	**0**	**0**	**0**	**7**	**7.0**	**5**	**1**	**222**	**60**	**13**	**6**	**7**	**314**	**330.7**
TOTAL	**0**	**0**	**34**	**12**	**0**	**1**	**0**	**47**	**48.3**	**5**	**2**	**651**	**160**	**48**	**15**	**21**	**902**	**961.3**
16:00 - 16:15	0	0	2	0	0	0	0	2	2.0	0	2	122	10	3	0	3	140	143.3
16:15 - 16:30	0	0	2	1	0	0	0	3	3.0	0	0	115	24	5	0	1	145	148.5
16:30 - 16:45	0	0	0	0	1	0	0	1	1.5	2	1	125	17	2	0	2	149	149.8
16:45 - 17:00	0	0	2	0	0	0	0	2	2.0	1	3	95	9	4	0	2	114	115.4
Hourly Total	**0**	**0**	**6**	**1**	**1**	**0**	**0**	**8**	**8.5**	**3**	**6**	**457**	**60**	**14**	**0**	**8**	**548**	**557.0**
17:00 - 17:15	0	0	3	0	0	0	0	3	3.0	1	2	195	23	1	0	2	224	224.5
17:15 - 17:30	0	0	4	1	0	0	0	5	5.0	0	0	119	10	1	1	2	133	136.8
17:30 - 17:45	0	1	1	2	0	0	0	4	3.4	1	3	97	11	0	0	3	115	115.4
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	2	99	13	0	0	1	115	114.8
Hourly Total	**0**	**1**	**8**	**3**	**0**	**0**	**0**	**12**	**11.4**	**2**	**7**	**510**	**57**	**2**	**1**	**8**	**587**	**591.5**
18:00 - 18:15	0	0	2	1	0	0	0	3	3.0	0	4	89	10	0	0	3	106	106.6
18:15 - 18:30	0	0	1	0	0	0	0	1	1.0	0	5	86	5	0	0	0	96	93.0
18:30 - 18:45	0	0	2	0	0	0	0	2	2.0	0	6	64	3	1	0	3	77	76.9
18:45 - 19:00	0	0	1	0	0	0	0	1	1.0	0	0	66	2	1	0	1	70	71.5
Hourly Total	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**7**	**7.0**	**0**	**15**	**305**	**20**	**2**	**0**	**7**	**349**	**348.0**
TOTAL	**0**	**1**	**20**	**5**	**1**	**0**	**0**	**27**	**26.9**	**5**	**28**	**1272**	**137**	**18**	**1**	**23**	**1484**	**1496.5**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Wednesday 27th September 2023
Junction: 2
Approach: Broad Rushes

	Left to Station Road (N)									Right to Station Road (S)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	36	4	6	4	0	50	58.2	0	0	0	0	0	0	0	0	0.0
07:15 - 07:30	0	0	59	17	10	6	0	92	104.8	0	0	0	0	0	0	0	0	0.0
07:30 - 07:45	0	0	72	12	4	10	0	98	113.0	0	0	3	0	1	0	0	4	4.5
07:45 - 08:00	0	0	75	9	5	10	0	99	114.5	0	0	1	0	0	0	0	1	1.0
Hourly Total	**0**	**0**	**242**	**42**	**25**	**30**	**0**	339	390.5	**0**	**0**	**4**	**0**	**1**	**0**	**0**	5	5.5
08:00 - 08:15	0	0	79	8	1	10	0	98	111.5	0	0	2	1	0	0	0	3	3.0
08:15 - 08:30	0	0	42	11	9	4	0	66	75.7	0	0	3	0	0	0	0	3	3.0
08:30 - 08:45	0	0	54	7	1	9	0	71	83.2	0	0	4	1	0	0	0	5	5.0
08:45 - 09:00	0	0	51	13	6	6	0	76	86.8	0	0	5	1	1	0	0	7	7.5
Hourly Total	**0**	**0**	**226**	**39**	**17**	**29**	**0**	311	357.2	**0**	**0**	**14**	**3**	**1**	**0**	**0**	18	18.5
09:00 - 09:15	0	0	39	8	5	7	0	59	70.6	0	0	2	0	1	0	0	3	3.5
09:15 - 09:30	0	0	31	16	4	6	0	57	66.8	0	0	1	1	0	0	0	2	2.0
09:30 - 09:45	0	0	33	6	8	10	0	57	74.0	0	0	4	1	0	0	0	5	5.0
09:45 - 10:00	0	0	37	8	5	6	0	56	66.3	0	0	1	0	0	0	0	1	1.0
Hourly Total	**0**	**0**	**140**	**38**	**22**	**29**	**0**	229	277.7	**0**	**0**	**8**	**2**	**1**	**0**	**0**	11	11.5
TOTAL	**0**	**0**	**608**	**119**	**64**	**88**	**0**	879	1025.4	**0**	**0**	**26**	**5**	**3**	**0**	**0**	34	35.5
16:00 - 16:15	0	4	130	17	1	10	0	162	173.1	0	0	3	1	0	0	0	4	4.0
16:15 - 16:30	1	3	87	8	3	9	0	111	121.6	0	0	3	0	0	0	0	3	3.0
16:30 - 16:45	0	3	85	11	1	3	0	103	105.6	0	0	3	0	0	0	0	3	3.0
16:45 - 17:00	0	2	90	7	5	5	0	109	116.8	0	0	3	0	0	0	0	3	3.0
Hourly Total	**1**	**12**	**392**	**43**	**10**	**27**	**0**	485	517.1	**0**	**0**	**12**	**1**	**0**	**0**	**0**	13	13.0
17:00 - 17:15	0	2	132	12	0	3	0	149	151.7	0	0	3	0	0	0	0	3	3.0
17:15 - 17:30	0	1	90	3	2	2	0	98	101.0	0	0	3	1	0	0	0	4	4.0
17:30 - 17:45	0	0	130	7	2	5	0	144	151.5	0	0	10	0	0	0	0	10	10.0
17:45 - 18:00	0	0	73	6	1	2	0	82	85.1	0	0	4	0	0	0	0	4	4.0
Hourly Total	**0**	**3**	**425**	**28**	**5**	**12**	**0**	473	489.3	**0**	**0**	**20**	**1**	**0**	**0**	**0**	21	21.0
18:00 - 18:15	1	4	175	8	1	2	0	191	190.9	0	0	2	0	0	0	0	2	2.0
18:15 - 18:30	0	1	66	2	4	2	0	75	79.0	0	0	3	0	0	0	0	3	3.0
18:30 - 18:45	0	2	108	4	1	4	0	119	123.5	0	0	2	0	0	0	0	2	2.0
18:45 - 19:00	0	0	45	5	0	3	0	53	56.9	0	0	1	0	0	0	0	1	1.0
Hourly Total	**1**	**7**	**394**	**19**	**6**	**11**	**0**	438	450.3	**0**	**0**	**8**	**0**	**0**	**0**	**0**	8	8.0
TOTAL	**2**	**22**	**1211**	**90**	**21**	**50**	**0**	1396	1456.7	**0**	**0**	**40**	**2**	**0**	**0**	**0**	42	42.0

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

APPENDIX 15 – A453/Kegworth Road Roundabout Junction Turning Count Results

Road Data Services Ltd

East Midlands Airport
Wednesday 20th September 2023
Junction: 4
Approach: A453 Exit Slip Road

	To Kegworth Road (E)									To Kegworth Road (S)									To A453 Entry Slip Road								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	14	4	0	0	0	18	18.0	0	0	4	0	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0
07:15 - 07:30	0	0	11	2	0	0	0	13	13.0	0	0	2	1	0	1	0	4	5.3	0	0	0	0	0	0	0	0	0.0
07:30 - 07:45	0	0	11	0	0	0	0	11	11.0	0	0	7	0	0	0	0	7	7.0	0	0	0	0	0	0	0	0	0.0
07:45 - 08:00	0	0	10	1	0	0	0	11	11.0	0	0	4	2	0	0	0	6	6.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**46**	**7**	**0**	**0**	**0**	**53**	**53.0**	**0**	**0**	**17**	**3**	**0**	**1**	**0**	**21**	**22.3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	0	0	8	2	1	0	0	11	11.5	0	0	3	2	0	0	0	5	5.0	0	0	0	0	0	0	0	0	0.0
08:15 - 08:30	0	0	5	0	0	0	0	5	5.0	0	0	6	1	1	0	0	8	8.5	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	0	0	4	0	0	1	0	5	6.3	0	0	2	3	1	0	0	6	6.5	0	0	0	0	0	0	0	0	0.0
08:45 - 09:00	0	0	5	0	0	0	0	5	5.0	0	0	3	0	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**22**	**2**	**1**	**1**	**0**	**26**	**27.8**	**0**	**0**	**14**	**6**	**2**	**0**	**0**	**22**	**23.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
09:00 - 09:15	0	0	2	0	0	0	0	2	2.0	0	0	2	0	0	0	1	3	4.0	0	0	0	0	0	0	0	0	0.0
09:15 - 09:30	0	0	5	2	0	0	0	7	7.0	0	0	1	1	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0
09:30 - 09:45	0	0	3	0	0	0	0	3	3.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
09:45 - 10:00	0	0	2	3	0	0	0	5	5.0	0	0	1	0	0	1	0	2	3.3	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**12**	**5**	**0**	**0**	**0**	**17**	**17.0**	**0**	**0**	**5**	**1**	**0**	**1**	**1**	**8**	**10.3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**0**	**0**	**80**	**14**	**1**	**1**	**0**	**96**	**97.8**	**0**	**0**	**36**	**10**	**2**	**2**	**1**	**51**	**55.6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
16:00 - 16:15	0	0	1	1	0	0	0	2	2.0	0	0	6	1	0	0	0	7	7.0	0	0	0	0	0	0	0	0	0.0
16:15 - 16:30	0	0	3	1	0	0	0	4	4.0	0	0	9	2	0	0	0	11	11.0	0	0	0	0	0	0	0	0	0.0
16:30 - 16:45	0	0	5	0	0	0	0	5	5.0	0	0	9	2	0	0	0	11	11.0	0	0	0	0	0	0	0	0	0.0
16:45 - 17:00	0	0	6	0	0	0	0	6	6.0	0	0	4	1	1	0	0	6	6.5	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**15**	**2**	**0**	**0**	**0**	**17**	**17.0**	**0**	**0**	**28**	**6**	**1**	**0**	**0**	**35**	**35.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
17:00 - 17:15	0	0	1	1	0	0	0	2	2.0	0	0	8	2	0	0	0	10	10.0	0	0	0	0	0	0	0	0	0.0
17:15 - 17:30	0	0	3	0	0	0	0	3	3.0	0	0	6	1	0	0	0	7	7.0	0	0	0	0	0	0	0	0	0.0
17:30 - 17:45	0	0	1	0	0	0	1	2	3.0	0	0	8	2	0	0	0	10	10.0	0	0	0	0	0	0	0	0	0.0
17:45 - 18:00	0	0	6	2	0	0	1	9	10.0	0	0	9	0	0	0	0	9	9.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**11**	**3**	**0**	**0**	**2**	**16**	**18.0**	**0**	**0**	**31**	**5**	**0**	**0**	**0**	**36**	**36.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
18:00 - 18:15	0	0	5	0	0	0	0	5	5.0	0	0	6	0	0	0	0	6	6.0	0	0	0	0	0	0	0	0	0.0
18:15 - 18:30	0	0	1	0	0	0	0	1	1.0	0	0	4	0	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	0	6	0	0	0	0	6	6.0	0	0	0	0	0	0	0	0	0.0
18:45 - 19:00	0	0	3	1	0	0	0	4	4.0	0	0	0	1	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**9**	**1**	**0**	**0**	**0**	**10**	**10.0**	**0**	**0**	**16**	**1**	**0**	**0**	**0**	**17**	**17.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**0**	**0**	**35**	**6**	**0**	**0**	**2**	**43**	**45.0**	**0**	**0**	**75**	**12**	**1**	**0**	**0**	**88**	**88.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Wednesday 20th September 2023
Junction: 4
Approach: Kegworth Road East

	To Kegworth Road (S)									To A453 Entry Slip Road									To A453 Exit Slip Road								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	1	0	0	0	1	1.0	0	0	5	2	0	0	0	7	7.0	0	0	0	0	0	0	0	0	0.0
07:15 - 07:30	0	0	1	3	0	0	0	4	4.0	0	1	2	0	0	0	0	3	2.4	0	0	0	0	0	0	0	0	0.0
07:30 - 07:45	0	0	3	1	0	0	0	4	4.0	0	0	4	0	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0
07:45 - 08:00	0	0	6	0	0	0	0	6	6.0	0	0	13	0	0	0	0	13	13.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**10**	**5**	**0**	**0**	**0**	**15**	**15.0**	**0**	**1**	**24**	**2**	**0**	**0**	**0**	**27**	**26.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	0	0	6	1	0	0	0	7	7.0	0	0	5	0	0	1	0	6	7.3	0	0	0	0	0	0	0	0	0.0
08:15 - 08:30	0	0	1	2	0	0	0	3	3.0	0	0	2	0	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	0	0	2	1	0	0	0	3	3.0	0	0	3	0	1	0	0	4	4.5	0	0	0	0	0	0	0	0	0.0
08:45 - 09:00	0	0	1	1	0	0	0	2	2.0	0	0	6	2	1	0	0	9	9.5	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**10**	**5**	**0**	**0**	**0**	**15**	**15.0**	**0**	**0**	**16**	**2**	**3**	**1**	**0**	**22**	**24.8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
09:00 - 09:15	1	0	0	1	0	0	0	2	1.2	0	0	6	1	0	0	0	7	7.0	0	0	0	0	0	0	0	0	0.0
09:15 - 09:30	0	0	0	1	0	0	0	1	1.0	0	0	1	0	0	1	0	2	3.3	0	0	0	0	0	0	0	0	0.0
09:30 - 09:45	0	0	3	0	0	0	0	3	3.0	0	0	3	0	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0
09:45 - 10:00	0	0	1	1	0	0	0	2	2.0	0	0	8	0	0	0	0	8	8.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**1**	**0**	**4**	**3**	**0**	**0**	**0**	**8**	**7.2**	**0**	**0**	**18**	**1**	**0**	**1**	**0**	**20**	**21.3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**1**	**0**	**24**	**13**	**0**	**0**	**0**	**38**	**37.2**	**0**	**1**	**58**	**5**	**3**	**2**	**0**	**69**	**72.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
16:00 - 16:15	0	3	3	2	0	0	0	8	6.2	0	0	32	2	0	0	0	34	34.0	0	0	0	0	0	0	0	0	0.0
16:15 - 16:30	0	0	3	0	0	0	0	3	3.0	0	0	14	2	0	0	0	16	16.0	0	0	0	0	0	0	0	0	0.0
16:30 - 16:45	0	0	2	1	0	0	0	3	3.0	0	1	13	5	0	0	0	19	18.4	0	0	0	0	0	0	0	0	0.0
16:45 - 17:00	0	0	5	0	0	0	0	5	5.0	0	0	33	2	0	0	0	35	35.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**3**	**13**	**3**	**0**	**0**	**0**	**19**	**17.2**	**0**	**1**	**92**	**11**	**0**	**0**	**0**	**104**	**103.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
17:00 - 17:15	0	0	4	0	0	0	0	4	4.0	0	0	30	1	0	0	0	31	31.0	0	0	0	0	0	0	0	0	0.0
17:15 - 17:30	1	0	8	0	0	0	0	9	8.2	0	0	7	2	0	0	0	9	9.0	0	0	0	0	0	0	0	0	0.0
17:30 - 17:45	0	0	1	0	0	0	0	1	1.0	0	0	11	2	1	2	0	16	19.1	0	0	0	0	0	0	0	0	0.0
17:45 - 18:00	0	0	5	1	0	0	2	8	10.0	0	0	13	2	0	0	0	15	15.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**1**	**0**	**18**	**1**	**0**	**0**	**2**	**22**	**23.2**	**0**	**0**	**61**	**7**	**1**	**2**	**0**	**71**	**74.1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
18:00 - 18:15	0	0	0	0	0	0	1	1	2.0	0	0	20	1	0	0	0	21	21.0	0	0	0	0	0	0	0	0	0.0
18:15 - 18:30	0	0	5	1	0	0	0	6	6.0	0	0	22	1	1	0	1	25	26.5	0	0	0	0	0	0	0	0	0.0
18:30 - 18:45	0	0	4	0	0	0	0	4	4.0	0	0	5	2	1	0	0	8	8.5	0	0	0	0	0	0	0	0	0.0
18:45 - 19:00	0	0	2	0	0	0	1	3	4.0	0	0	27	1	0	0	0	28	28.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**11**	**1**	**0**	**0**	**2**	**14**	**16.0**	**0**	**0**	**74**	**5**	**2**	**0**	**1**	**82**	**84.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**1**	**3**	**42**	**5**	**0**	**0**	**4**	**55**	**56.4**	**0**	**1**	**227**	**23**	**3**	**2**	**1**	**257**	**261.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Wednesday 20th September 2023
Junction: 4
Approach: Kegworth Road South

	To A453 Entry Slip Road									To A453 Exit Slip Road									To Kegworth Road (E)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	9	3	0	0	0	12	12.0
07:15 - 07:30	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	7	1	0	0	0	8	8.0
07:30 - 07:45	0	1	3	1	0	0	0	5	4.4	0	0	0	0	0	0	0	0	0.0	0	0	11	3	0	0	1	15	16.0
07:45 - 08:00	0	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0	0.0	3	0	15	3	0	0	0	21	18.6
Hourly Total	**0**	**1**	**5**	**1**	**0**	**1**	**0**	**8**	**8.7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**3**	**0**	**42**	**10**	**0**	**0**	**1**	**56**	**54.6**
08:00 - 08:15	0	0	1	1	0	1	0	3	4.3	0	0	0	0	0	0	0	0	0.0	0	0	10	1	0	0	0	11	11.0
08:15 - 08:30	0	0	3	0	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0	1	0	6	2	0	0	0	9	8.2
08:30 - 08:45	0	0	3	0	1	0	0	4	4.5	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0
08:45 - 09:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	5	2	0	0	1	8	9.0
Hourly Total	**0**	**0**	**7**	**1**	**1**	**1**	**0**	**10**	**11.8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**1**	**0**	**24**	**5**	**0**	**0**	**1**	**31**	**31.2**
09:00 - 09:15	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	1	1	0	0	0	2	2.0
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	10	0	0	0	0	10	10.0
09:30 - 09:45	0	0	1	1	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
09:45 - 10:00	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	6	1	0	0	0	7	7.0
Hourly Total	**0**	**0**	**3**	**1**	**1**	**0**	**0**	**5**	**5.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**19**	**2**	**0**	**0**	**0**	**21**	**21.0**
TOTAL	**0**	**1**	**15**	**3**	**2**	**2**	**0**	**23**	**26.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**4**	**0**	**85**	**17**	**0**	**0**	**2**	**108**	**106.8**
16:00 - 16:15	0	0	3	0	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0	0	0	3	3	1	0	0	7	7.5
16:15 - 16:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	6	0	0	0	0	6	6.0
16:30 - 16:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	13	3	0	0	0	16	16.0
16:45 - 17:00	0	0	0	2	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0	0	0	4	0	1	0	0	5	5.5
Hourly Total	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**5**	**5.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**26**	**6**	**2**	**0**	**0**	**34**	**35.0**
17:00 - 17:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	10	1	0	0	0	11	11.0
17:15 - 17:30	0	0	1	1	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0	1	0	4	2	0	0	0	7	6.2
17:30 - 17:45	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0	0	0	9	3	0	0	0	12	12.0
17:45 - 18:00	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0	0	0	5	1	0	0	0	6	6.0
Hourly Total	**0**	**0**	**5**	**1**	**0**	**0**	**0**	**6**	**6.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**1**	**0**	**28**	**7**	**0**	**0**	**0**	**36**	**35.2**
18:00 - 18:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	10	1	0	0	1	12	13.0
18:15 - 18:30	0	0	0	1	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	5	1	0	0	0	6	6.0
18:30 - 18:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	1	0	10	1	0	0	0	12	11.2
18:45 - 19:00	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	9	2	0	0	0	11	11.0
Hourly Total	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**3**	**3.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**1**	**0**	**34**	**5**	**0**	**0**	**1**	**41**	**41.2**
TOTAL	**0**	**0**	**10**	**4**	**0**	**0**	**0**	**14**	**14.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**2**	**0**	**88**	**18**	**2**	**0**	**1**	**111**	**111.4**

PCU Factors	
CYCLE	0.2
M/CYCL	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

APPENDIX 16 – A453/Barton Lane/West Leake Lane Roundabouts Junction Turning Count Results

Road Data Services Ltd

East Midlands Airport
Wednesday 20th September 2023
Junction: 6
Approach: Barton Lane North

	To A453 Entry Slip Road									To Barton Lane (S)									To A453 Exit Slip Road								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	2	0	0	0	0	2	2.0	0	0	5	1	0	0	0	6	6.0	0	0	0	0	0	0	0	0	0.0
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	0	1	2	0	0	1	4	5.0	0	0	0	0	0	0	0	0	0.0
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0	0	0	9	4	1	2	0	16	19.1	0	0	0	0	0	0	0	0	0.0
07:45 - 08:00	0	0	0	0	0	0	0	0	0.0	0	0	6	5	1	1	0	13	14.8	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2.0**	**0**	**0**	**21**	**12**	**2**	**3**	**1**	**39**	**44.9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0	0	0	8	1	1	0	1	11	12.5	0	0	0	0	0	0	0	0	0.0
08:15 - 08:30	0	0	0	0	0	0	0	0	0.0	0	0	10	3	0	3	0	16	19.9	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0	0	0	10	3	1	0	0	14	14.5	0	0	0	0	0	0	0	0	0.0
08:45 - 09:00	0	0	0	0	0	0	0	0	0.0	0	0	5	1	0	2	0	8	10.6	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**33**	**8**	**2**	**5**	**1**	**49**	**57.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0	0	0	1	1	1	1	0	4	5.8	0	0	0	0	0	0	0	0	0.0
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	0	4	2	0	0	0	6	6.0	0	0	0	0	0	0	0	0	0.0
09:30 - 09:45	0	0	0	0	0	0	0	0	0.0	0	0	5	2	0	0	1	8	9.0	0	0	0	0	0	0	0	0	0.0
09:45 - 10:00	0	0	0	0	0	0	0	0	0.0	0	0	3	1	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**13**	**6**	**1**	**1**	**1**	**22**	**24.8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2.0**	**0**	**0**	**67**	**26**	**5**	**9**	**3**	**110**	**127.2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
16:00 - 16:15	0	0	3	0	0	0	0	3	3.0	0	0	7	1	0	0	0	8	8.0	0	0	0	0	0	0	0	0	0.0
16:15 - 16:30	0	0	0	0	0	0	0	0	0.0	0	0	9	1	0	0	0	10	10.0	0	0	0	0	0	0	0	0	0.0
16:30 - 16:45	0	0	1	0	0	0	0	1	1.0	1	0	3	0	0	0	0	4	3.2	0	0	0	0	0	0	0	0	0.0
16:45 - 17:00	0	0	0	0	0	0	0	0	0.0	0	0	4	0	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**4**	**4.0**	**1**	**0**	**23**	**2**	**0**	**0**	**0**	**26**	**25.2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
17:00 - 17:15	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
17:15 - 17:30	0	0	0	0	0	0	0	0	0.0	1	0	5	0	0	0	0	6	5.2	0	0	0	0	0	0	0	0	0.0
17:30 - 17:45	0	0	0	0	0	0	0	0	0.0	0	0	3	1	0	0	1	5	6.0	0	0	0	0	0	0	0	0	0.0
17:45 - 18:00	0	0	1	0	0	0	0	1	1.0	0	0	4	2	0	0	0	6	6.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1.0**	**1**	**0**	**13**	**3**	**0**	**0**	**1**	**18**	**18.2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
18:00 - 18:15	0	0	1	0	0	0	0	1	1.0	0	0	5	0	0	0	0	5	5.0	0	0	0	0	0	0	0	0	0.0
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	0	3	1	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0
18:30 - 18:45	0	0	1	0	0	0	0	1	1.0	0	0	3	1	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2.0**	**0**	**0**	**14**	**2**	**0**	**0**	**0**	**16**	**16.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**7**	**7.0**	**2**	**0**	**50**	**7**	**0**	**0**	**1**	**60**	**59.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Wednesday 20th September 2023
Junction: 6
Approach: A453 Entry Slip Road

	To Barton Lane (S)									To A453 Exit Slip Road									To Barton Lane (N)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
07:45 - 08:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:15 - 08:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:45 - 09:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
09:30 - 09:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
09:45 - 10:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
16:00 - 16:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
16:15 - 16:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
16:30 - 16:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
16:45 - 17:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
17:00 - 17:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
17:15 - 17:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
17:30 - 17:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
18:00 - 18:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Wednesday 20th September 2023
Junction: 6
Approach: Barton Lane South

	To A453 Exit Slip Road									To Barton Lane (N)									To A453 Entry Slip Road								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0	0	0	0	0.0	0	0	5	1	1	0	0	7	7.5	0	0	2	0	2	1	0	5	7.3
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	6	1	1	1	0	9	10.8
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	13	1	0	2	1	17	20.6
07:45 - 08:00	0	0	0	0	0	0	0	0	0.0	0	0	2	1	0	0	0	3	3.0	0	0	11	1	0	4	0	16	21.2
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**9**	**2**	**1**	**0**	**0**	**12**	**12.5**	**0**	**0**	**32**	**3**	**3**	**8**	**1**	**47**	**59.9**
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	2	0	3	5.6	0	0	15	3	0	0	0	18	18.0
08:15 - 08:30	0	0	0	0	0	0	0	0	0.0	0	0	2	1	0	0	0	3	3.0	0	0	13	0	0	0	1	14	15.0
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	1	0	4	5.3	0	0	10	0	0	0	0	10	10.0
08:45 - 09:00	0	0	0	0	0	0	0	0	0.0	0	0	3	1	0	1	0	5	6.3	0	0	9	1	0	0	1	11	12.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**9**	**2**	**0**	**4**	**0**	**15**	**20.2**	**0**	**0**	**47**	**4**	**0**	**0**	**2**	**53**	**55.0**
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	0	0	4	1	0	0	0	5	5.0
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	1	0	4	5.3	0	0	3	0	1	0	1	5	6.5
09:30 - 09:45	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	1	0	3	4.3	0	0	5	0	0	0	0	5	5.0
09:45 - 10:00	0	0	0	0	0	0	0	0	0.0	0	0	0	1	1	0	1	3	4.5	0	0	4	0	0	2	0	6	8.6
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**7**	**1**	**1**	**2**	**1**	**12**	**16.1**	**0**	**0**	**16**	**1**	**1**	**2**	**1**	**21**	**25.1**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**25**	**5**	**2**	**6**	**1**	**39**	**48.8**	**0**	**0**	**95**	**8**	**4**	**10**	**4**	**121**	**140.0**
16:00 - 16:15	0	0	0	0	0	0	0	0	0.0	0	0	3	1	1	0	0	5	5.5	0	0	6	4	0	0	0	10	10.0
16:15 - 16:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	1	8	2	0	0	1	12	12.4
16:30 - 16:45	0	0	0	0	0	0	0	0	0.0	0	0	1	1	0	0	0	2	2.0	0	1	7	0	0	1	0	9	9.7
16:45 - 17:00	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0	0	0	7	1	0	0	0	8	8.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**7**	**2**	**1**	**0**	**0**	**10**	**10.5**	**0**	**2**	**28**	**7**	**0**	**1**	**1**	**39**	**40.1**
17:00 - 17:15	0	0	0	0	0	0	0	0	0.0	0	0	0	2	0	0	0	2	2.0	0	0	13	1	0	1	1	16	18.3
17:15 - 17:30	0	0	0	0	0	0	0	0	0.0	0	0	2	1	0	0	0	3	3.0	0	0	15	2	0	0	1	18	19.0
17:30 - 17:45	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	0	0	13	1	0	0	0	14	14.0
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	6	0	0	0	0	6	6.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**5**	**3**	**0**	**0**	**0**	**8**	**8.0**	**0**	**0**	**47**	**4**	**0**	**1**	**2**	**54**	**57.3**
18:00 - 18:15	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0	0	0	5	1	0	1	1	8	10.3
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0	0	0	4	1	0	1	0	6	7.3
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	5	1	0	0	0	6	6.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**9**	**9.0**	**0**	**0**	**15**	**3**	**0**	**2**	**1**	**21**	**24.6**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**21**	**5**	**1**	**0**	**0**	**27**	**27.5**	**0**	**2**	**90**	**14**	**0**	**4**	**4**	**114**	**122.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Wednesday 20th September 2023
Junction: 6
Approach: A453 Exit Slip Road

	To Barton Lane (N)									To A453 Entry Slip Road									To Barton Lane (S)								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	4	1	1	3	0	9	13.4	0	0	0	0	0	0	0	0	0.0	0	0	24	14	2	5	0	45	52.5
07:15 - 07:30	0	0	4	0	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0	0	1	25	13	3	5	0	47	54.4
07:30 - 07:45	0	0	1	4	0	1	0	6	7.3	0	0	0	0	0	0	0	0	0.0	0	0	30	11	1	3	0	45	49.4
07:45 - 08:00	0	0	4	2	0	1	0	7	8.3	0	0	0	0	0	0	0	0	0.0	0	0	28	17	2	5	0	52	59.5
Hourly Total	**0**	**0**	**13**	**7**	**1**	**5**	**0**	**26**	**33.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**107**	**55**	**8**	**18**	**0**	**189**	**215.8**
08:00 - 08:15	0	0	3	2	0	0	0	5	5.0	0	0	0	0	0	0	0	0	0.0	0	0	39	11	1	5	0	56	63.0
08:15 - 08:30	0	0	4	0	1	0	0	5	5.5	0	0	0	0	0	0	0	0	0.0	0	0	49	9	7	8	0	73	86.9
08:30 - 08:45	0	0	10	4	1	0	0	15	15.5	0	0	0	0	0	0	0	0	0.0	0	0	42	6	3	7	0	58	68.6
08:45 - 09:00	0	0	8	5	2	1	0	16	18.3	0	0	0	0	0	0	0	0	0.0	0	0	40	13	5	3	0	61	67.4
Hourly Total	**0**	**0**	**25**	**11**	**4**	**1**	**0**	**41**	**44.3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**170**	**39**	**16**	**23**	**0**	**248**	**285.9**
09:00 - 09:15	0	0	28	8	1	1	0	38	39.8	0	0	0	0	0	0	0	0	0.0	0	0	34	12	2	7	0	55	65.1
09:15 - 09:30	0	0	5	5	1	1	0	12	13.8	0	0	0	0	0	0	0	0	0.0	0	0	26	7	2	5	0	40	47.5
09:30 - 09:45	0	0	7	2	2	0	0	11	12.0	0	0	0	0	0	0	0	0	0.0	0	0	8	2	1	1	0	12	13.8
09:45 - 10:00	0	0	4	0	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0	0	0	5	5	0	3	0	13	16.9
Hourly Total	**0**	**0**	**44**	**15**	**4**	**2**	**0**	**65**	**69.6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**73**	**26**	**5**	**16**	**0**	**120**	**143.3**
TOTAL	**0**	**0**	**82**	**33**	**9**	**8**	**0**	**132**	**146.9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**350**	**120**	**29**	**57**	**0**	**557**	**645.0**
16:00 - 16:15	0	0	2	1	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0	0	0	17	5	0	5	1	28	35.5
16:15 - 16:30	0	0	1	2	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0	0	1	30	4	0	3	0	38	41.3
16:30 - 16:45	0	0	4	1	0	0	0	5	5.0	0	0	0	0	0	0	0	0	0.0	0	0	36	2	1	4	0	43	48.7
16:45 - 17:00	0	1	2	0	0	0	0	3	2.4	0	0	0	0	0	0	0	0	0.0	0	0	50	8	0	4	0	62	67.2
Hourly Total	**0**	**1**	**9**	**4**	**0**	**0**	**0**	**14**	**13.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**133**	**19**	**1**	**16**	**1**	**171**	**192.7**
17:00 - 17:15	0	0	3	0	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0	0	0	34	8	0	1	0	43	44.3
17:15 - 17:30	0	1	2	0	0	0	0	3	2.4	0	0	0	0	0	0	0	0	0.0	0	0	47	5	1	1	0	54	55.8
17:30 - 17:45	0	0	2	1	0	0	1	4	5.0	0	0	0	0	0	0	0	0	0.0	0	0	45	2	0	2	0	49	51.6
17:45 - 18:00	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0	0	0	38	3	0	0	0	41	41.0
Hourly Total	**0**	**1**	**9**	**1**	**0**	**0**	**1**	**12**	**12.4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**164**	**18**	**1**	**4**	**0**	**187**	**192.7**
18:00 - 18:15	0	0	3	0	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0	0	0	23	3	0	0	0	26	26.0
18:15 - 18:30	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	27	2	0	1	0	30	31.3
18:30 - 18:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	13	3	1	2	0	19	22.1
18:45 - 19:00	0	0	4	0	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0	0	0	17	2	0	4	0	23	28.2
Hourly Total	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**9**	**9.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**80**	**10**	**1**	**7**	**0**	**98**	**107.6**
TOTAL	**0**	**2**	**27**	**5**	**0**	**0**	**1**	**35**	**34.8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**377**	**47**	**3**	**27**	**1**	**456**	**493.0**

PCU Factors	
CYCLE	0.2
M/CYCL	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Wednesday 20th September 2023
Junction: 7
Approach: Barton Lane

	To A453 Exit Slip Road									To West Leake Lane									To A453 Entry Slip Road								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0	0	0	0	0.0	0	0	28	12	2	5	0	47	54.5	0	0	1	3	0	0	0	4	4.0
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	1	20	13	1	5	1	41	48.4	0	0	6	2	2	0	0	10	11.0
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0	0	0	35	10	2	4	0	51	57.2	0	0	4	5	0	1	0	10	11.3
07:45 - 08:00	0	0	0	0	0	0	0	0	0.0	0	0	29	21	1	6	0	57	65.3	0	0	5	1	2	0	0	8	9.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**112**	**56**	**6**	**20**	**1**	**196**	**225.4**	**0**	**0**	**16**	**11**	**4**	**1**	**0**	**32**	**35.3**
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0	0	0	41	11	2	5	1	60	68.5	0	0	6	1	0	0	0	7	7.0
08:15 - 08:30	0	0	0	0	0	0	0	0	0.0	0	0	47	11	6	7	0	71	83.1	0	0	12	1	1	4	0	18	23.7
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0	0	0	41	9	2	6	0	58	66.8	0	0	11	0	2	1	0	14	16.3
08:45 - 09:00	0	0	0	0	0	0	0	0	0.0	0	0	40	13	5	4	0	62	69.7	0	0	5	1	0	1	0	7	8.3
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**169**	**44**	**15**	**22**	**1**	**251**	**288.1**	**0**	**0**	**34**	**3**	**3**	**6**	**0**	**46**	**55.3**
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0	0	0	25	10	1	8	0	44	54.9	0	0	10	3	2	0	0	15	16.0
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	0	23	9	2	5	0	39	46.5	0	0	7	0	0	0	0	7	7.0
09:30 - 09:45	0	0	0	0	0	0	0	0	0.0	0	0	5	1	0	1	1	8	10.3	0	0	8	3	1	0	0	12	12.5
09:45 - 10:00	0	0	0	0	0	0	0	0	0.0	0	0	5	3	0	3	0	11	14.9	0	0	3	3	0	0	0	6	6.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**58**	**23**	**3**	**17**	**1**	**102**	**126.6**	**0**	**0**	**28**	**9**	**3**	**0**	**0**	**40**	**41.5**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**1**	**339**	**123**	**24**	**59**	**3**	**549**	**640.1**	**0**	**0**	**78**	**23**	**10**	**7**	**0**	**118**	**132.1**
16:00 - 16:15	0	0	0	0	0	0	0	0	0.0	0	0	20	5	0	5	1	31	38.5	0	0	4	1	0	0	0	5	5.0
16:15 - 16:30	0	0	0	0	0	0	0	0	0.0	0	1	35	4	0	3	0	43	46.3	0	0	4	1	0	0	0	5	5.0
16:30 - 16:45	0	0	0	0	0	0	0	0	0.0	1	0	38	1	1	4	0	45	49.9	0	0	1	1	0	0	0	2	2.0
16:45 - 17:00	0	0	0	0	0	0	0	0	0.0	0	0	51	8	0	4	0	63	68.2	0	0	3	0	0	0	0	3	3.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**1**	**1**	**144**	**18**	**1**	**16**	**1**	**182**	**202.9**	**0**	**0**	**12**	**3**	**0**	**0**	**0**	**15**	**15.0**
17:00 - 17:15	0	0	0	0	0	0	0	0	0.0	0	0	32	8	0	1	0	41	42.3	0	0	3	0	0	0	0	3	3.0
17:15 - 17:30	0	0	0	0	0	0	0	0	0.0	1	0	50	3	1	1	0	56	57.0	0	0	2	2	0	0	0	4	4.0
17:30 - 17:45	0	0	0	0	0	0	0	0	0.0	0	0	44	2	0	2	1	49	52.6	0	0	4	1	0	0	0	5	5.0
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	0	39	5	0	0	0	44	44.0	0	0	3	0	0	0	0	3	3.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**1**	**0**	**165**	**18**	**1**	**4**	**1**	**190**	**195.9**	**0**	**0**	**12**	**3**	**0**	**0**	**0**	**15**	**15.0**
18:00 - 18:15	0	0	0	0	0	0	0	0	0.0	0	0	24	3	0	0	0	27	27.0	0	0	4	0	0	0	0	4	4.0
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	0	27	3	0	1	0	31	32.3	0	0	3	0	0	0	0	3	3.0
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	0	13	4	1	2	0	20	23.1	0	0	3	0	0	0	0	3	3.0
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	0	20	1	0	4	0	25	30.2	0	0	0	1	0	0	0	1	1.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**84**	**11**	**1**	**7**	**0**	**103**	**112.6**	**0**	**0**	**10**	**1**	**0**	**0**	**0**	**11**	**11.0**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**2**	**1**	**393**	**47**	**3**	**27**	**2**	**475**	**511.4**	**0**	**0**	**34**	**7**	**0**	**0**	**0**	**41**	**41.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Wednesday 20th September 2023
Junction: 7
Approach: A453 Exit Slip Road

	To West Leake Lane									To A453 Entry Slip Road									To Barton Lane								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	1	2	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0	0	0	3	1	0	0	0	4	4.0
07:15 - 07:30	0	0	4	2	2	1	0	9	11.3	0	0	0	0	0	0	0	0	0.0	0	0	0	1	1	0	0	2	2.5
07:30 - 07:45	0	1	3	3	0	0	0	7	6.4	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0
07:45 - 08:00	0	0	8	4	0	1	0	13	14.3	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
Hourly Total	**0**	**1**	**16**	**11**	**2**	**2**	**0**	**32**	**35.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**8**	**2**	**1**	**0**	**0**	**11**	**11.5**
08:00 - 08:15	0	0	14	0	0	0	0	14	14.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:15 - 08:30	0	0	8	1	0	0	2	11	13.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	0	0	5	3	1	0	1	10	11.5	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:45 - 09:00	0	0	11	1	1	0	0	13	13.5	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
Hourly Total	**0**	**0**	**38**	**5**	**2**	**0**	**3**	**48**	**52.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2.0**
09:00 - 09:15	0	0	12	2	0	1	0	15	16.3	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
09:15 - 09:30	0	0	6	3	1	1	1	12	14.8	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
09:30 - 09:45	0	0	7	4	1	2	0	14	17.1	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
09:45 - 10:00	0	0	4	2	1	0	1	8	9.5	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**29**	**11**	**3**	**4**	**2**	**49**	**57.7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**2.0**
TOTAL	**0**	**1**	**83**	**27**	**7**	**6**	**5**	**129**	**144.7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**12**	**2**	**1**	**0**	**0**	**15**	**15.5**
16:00 - 16:15	0	0	1	2	0	1	1	5	7.3	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
16:15 - 16:30	0	0	10	2	0	2	0	14	16.6	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
16:30 - 16:45	0	0	5	4	1	1	1	12	14.8	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
16:45 - 17:00	0	0	18	1	0	0	0	19	19.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**34**	**9**	**1**	**4**	**2**	**50**	**57.7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	**3.0**
17:00 - 17:15	0	0	13	1	0	0	0	14	14.0	0	0	0	0	0	0	0	0	0.0	0	0	1	1	0	0	0	2	2.0
17:15 - 17:30	0	0	13	0	0	0	1	14	15.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
17:30 - 17:45	0	0	10	1	0	0	0	11	11.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
17:45 - 18:00	0	0	11	1	0	1	0	13	14.3	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
Hourly Total	**0**	**0**	**47**	**3**	**0**	**1**	**1**	**52**	**54.3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**4**	**4.0**
18:00 - 18:15	0	0	5	0	0	1	0	6	7.3	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
18:15 - 18:30	0	0	11	0	0	1	1	13	15.3	0	0	0	0	0	0	0	0	0.0	0	0	3	1	0	1	0	5	6.3
18:30 - 18:45	0	0	10	1	0	0	0	11	11.0	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
18:45 - 19:00	0	0	4	0	0	1	0	5	6.3	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**30**	**1**	**0**	**3**	**1**	**35**	**39.9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**5**	**1**	**0**	**1**	**0**	**7**	**8.3**
TOTAL	**0**	**0**	**111**	**13**	**1**	**8**	**4**	**137**	**151.9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**11**	**2**	**0**	**1**	**0**	**14**	**15.3**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Wednesday 20th September 2023
Junction: 7
Approach: West Leake Lane

	To A453 Entry Slip Road									To Barton Lane									To A453 Exit Slip Road								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	35	4	3	3	0	45	50.4	0	0	4	0	3	1	0	8	10.8	0	0	0	0	0	0	0	0	0.0
07:15 - 07:30	0	0	25	5	0	5	0	35	41.5	0	0	7	0	0	1	0	8	9.3	0	0	0	0	0	0	0	0	0.0
07:30 - 07:45	0	0	34	13	1	3	0	51	55.4	0	0	11	1	0	2	1	15	18.6	0	0	0	0	0	0	0	0	0.0
07:45 - 08:00	0	1	57	4	0	8	0	70	79.8	0	0	11	2	0	4	0	17	22.2	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**1**	**151**	**26**	**4**	**19**	**0**	201	227.1	**0**	**0**	**33**	**3**	**3**	**8**	**1**	48	60.9	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0.0
08:00 - 08:15	0	0	63	7	2	8	0	80	91.4	0	0	16	3	0	2	0	21	23.6	0	0	0	0	0	0	0	0	0.0
08:15 - 08:30	0	0	36	6	0	3	0	45	48.9	0	0	15	1	0	0	1	17	18.0	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	0	1	40	7	0	6	0	54	61.2	0	0	13	0	0	1	0	14	15.3	0	0	0	0	0	0	0	0	0.0
08:45 - 09:00	0	1	31	8	2	4	0	46	51.6	0	0	10	2	0	1	1	14	16.3	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**2**	**170**	**28**	**4**	**21**	**0**	225	253.1	**0**	**0**	**54**	**6**	**0**	**4**	**2**	66	73.2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0.0
09:00 - 09:15	0	0	32	6	0	7	0	45	54.1	0	0	6	1	0	0	0	7	7.0	0	0	0	0	0	0	0	0	0.0
09:15 - 09:30	0	0	22	7	1	6	0	36	44.3	0	0	4	0	1	1	1	7	9.8	0	0	0	0	0	0	0	0	0.0
09:30 - 09:45	0	0	25	2	0	6	0	33	40.8	0	0	7	0	0	1	0	8	9.3	0	0	0	0	0	0	0	0	0.0
09:45 - 10:00	0	0	18	6	2	6	0	32	40.8	0	0	4	1	1	2	1	9	13.1	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**97**	**21**	**3**	**25**	**0**	146	180.0	**0**	**0**	**21**	**2**	**2**	**4**	**2**	31	39.2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0.0
TOTAL	**0**	**3**	**418**	**75**	**11**	**65**	**0**	572	660.2	**0**	**0**	**108**	**11**	**5**	**16**	**5**	145	173.3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0.0
16:00 - 16:15	0	0	37	16	3	0	0	56	57.5	0	0	8	5	1	0	0	14	14.5	0	0	0	0	0	0	0	0	0.0
16:15 - 16:30	0	0	39	13	2	3	0	57	61.9	0	1	6	2	0	0	1	10	10.4	0	0	0	0	0	0	0	0	0.0
16:30 - 16:45	0	0	37	11	2	2	0	52	55.6	0	1	8	1	0	1	0	11	11.7	0	0	0	0	0	0	0	0	0.0
16:45 - 17:00	0	1	36	5	0	5	0	47	52.9	0	0	10	1	0	0	0	11	11.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**1**	**149**	**45**	**7**	**10**	**0**	212	227.9	**0**	**2**	**32**	**9**	**1**	**1**	**1**	46	47.6	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0.0
17:00 - 17:15	0	0	37	16	1	1	0	55	56.8	0	0	12	2	0	1	1	16	18.3	0	0	0	0	0	0	0	0	0.0
17:15 - 17:30	0	0	37	4	1	2	0	44	47.1	0	0	17	3	0	0	1	21	22.0	0	0	0	0	0	0	0	0	0.0
17:30 - 17:45	0	0	38	2	0	2	0	42	44.6	0	0	14	1	0	0	0	15	15.0	0	0	0	0	0	0	0	0	0.0
17:45 - 18:00	0	0	33	8	1	4	0	46	51.7	0	0	6	0	0	0	0	6	6.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**145**	**30**	**3**	**9**	**0**	187	200.2	**0**	**0**	**49**	**6**	**0**	**1**	**2**	58	61.3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0.0
18:00 - 18:15	0	1	24	0	0	0	0	25	24.4	0	0	8	1	0	1	1	11	13.3	0	0	0	0	0	0	0	0	0.0
18:15 - 18:30	0	0	13	1	3	5	0	22	30.0	0	0	4	0	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0
18:30 - 18:45	0	1	8	2	0	2	0	13	15.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
18:45 - 19:00	0	0	12	1	0	2	0	15	17.6	0	0	6	1	0	0	0	7	7.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**2**	**57**	**4**	**3**	**9**	**0**	75	87.0	**0**	**0**	**19**	**2**	**0**	**1**	**1**	23	25.3	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0.0
TOTAL	**0**	**3**	**351**	**79**	**13**	**28**	**0**	474	515.1	**0**	**2**	**100**	**17**	**1**	**3**	**4**	127	134.2	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0.0

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Road Data Services Ltd

East Midlands Airport
Wednesday 20th September 2023
Junction: 7
Approach: A453 Entry Slip Road

	To Barton Lane									To A453 Exit Slip Road									To West Leake Lane								
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
07:15 - 07:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
07:45 - 08:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:15 - 08:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
08:45 - 09:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
09:30 - 09:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
09:45 - 10:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
16:00 - 16:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
16:15 - 16:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
16:30 - 16:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
16:45 - 17:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
17:00 - 17:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
17:15 - 17:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
17:30 - 17:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
17:45 - 18:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
18:00 - 18:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
18:15 - 18:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
18:30 - 18:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
18:45 - 19:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0**

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

APPENDIX 17 – GEH Comparison

J1 - A453 / Walton Hill

Junction Arm	
A	Northern Arm
B	A453
C	Walton Hill

2022 Observed Flows (Lights AM)

	A	B	C
A	0	430	241
B	165	0	133
C	284	340	0

2022 Saturn Actual Flows (Lights AM)

	A	B	C
A	0	721	337
B	131	0	228
C	399	320	0

GEH Comparison

	A	B	C
A	0	12	6
B	3	0	7
C	6	1	0

J2 - A453 / East Midland Airport Access

Junction Arm	
A	East Midlands Airport Access
B	A453 (E)
C	A453(W)

2022 Observed Flows (Lights AM)

	A	B	C
A	0	104	35
B	239	0	312
C	127	458	0

2022 Saturn Actual Flows (Lights AM)

	A	B	C
A	0	4	67
B	58	0	291
C	267	776	0

GEH Comparison

	A	B	C
A	0	14	4
B	15	0	1
C	10	13	0

J3 - A453 / Hunter Road

Junction Arm	
A	Hunter Road
B	A453 (E)
C	A453 (W)

2022 Observed Flows (Lights AM)

	A	B	C
A	0	89	26
B	367	0	525
C	50	512	0

2022 Saturn Actual Flows (Lights AM)

	A	B	C
A	0	155	0
B	543	0	281
C	0	578	0

GEH Comparison

	A	B	C
A	0	6	7
B	8	0	12
C	10	3	0

J4 - A453 / M1 J23A Access / Donnington Services

Junction Arm	
A	A453 (N)
B	M1 J23A Access
C	Donnington Services Access
D	A453 (W)

2022 Observed Flows (Lights AM)

	A	B	C	D
A	0	486	57	395
B	828	0	102	448
C	41	89	0	50
D	368	213	21	0

2022 Saturn Actual Flows (Lights AM)

	A	B	C	D
A	0	145	0	211
B	1276	0	0	608
C	0	0	0	0
D	351	381	0	0

GEH Comparison

	A	B	C	D
A	0	19	11	11
B	14	0	14	7
C	9	13	0	10
D	1	10	6	0

J5 - A453 / Derby Road / M1 J24 / A50

Junction Arm	
A	M1 J24 (N)
B	A453 (N)
C	Derby Road
D	M1 J24 (S)
E	A453 (S)
F	A50
G	Hilton Hotel Lane

2022 Observed Flows (Lights AM)

	A	B	C	D	E	F	G
A	0	820	505	0	491	287	14
B	162	0	59	423	381	212	14
C	61	73	0	49	173	94	2
D	5	661	87	0	3	957	21
E	204	211	27	38	0	846	6
F						0	
G	5	63	9	23	17	9	0

2022 Saturn Actual Flows (Lights AM)

	A	B	C	D	E	F	G
A	0	440	521	0	87	0	0
B	136	0	1	660	68	507	64
C	183	0	0	122	0	370	20
D	0	802	84	0	4	545	75
E	163	84	1	0	0	1024	7
F	0	0	0	0	0	0	0
G	13	203	159	16	1	0	0

GEH Comparison

	A	B	C	D	E	F	G
A	0	15	1	0	24	24	5
B	2	0	11	10	21	16	8
C	11	12	0	8	19	18	5
D	3	5	0	0	1	15	8
E	3	10	7	9	0	6	0
F	0	0	0	0	0	0	0
G	3	12	16	2	5	4	0

J6 - A453 / Northon Arm

Junction Arm	
A	Northern Arm
B	A453 (E)
C	A453 (W)

2022 Observed Flows (Lights AM)

	A	B	C
A	0	42	28
B	205	0	110
C	208	485	0

2022 Saturn Actual Flows (Lights AM)

	A	B	C
A	0	119	77
B	118	0	164
C	344	458	0

GEH Comparison

	A	B	C
A	0	9	7
B	7	0	5
C	8	1	0

J7 - A453 / The Green

Junction Arm	
A	A453 (E)
B	The Green
C	A453 (W)

2022 Observed Flows (Lights AM)

	A	B	C
A	0	10	230
B	16	0	85
C	458	69	0

2022 Saturn Actual Flows (Lights AM)

	A	B	C
A	0	33	172
B	200	0	177
C	560	219	0

GEH Comparison

	A	B	C
A	0	5	4
B	18	0	8
C	5	13	0

J8 - A453 / Grimes Gate

Junction Arm	
A	A453 (E)
B	Grimes Gate
C	A453 (W)

2022 Observed Flows (Lights AM)

	A	B	C
A	0	20	234
B	62	0	6
C	467	7	0

2022 Saturn Actual Flows (Lights AM)

	A	B	C
A	0	36	205
B	43	0	0
C	760	0	0

GEH Comparison

	A	B	C
A	0	3	2
B	3	0	3
C	12	4	0

J9 - A453 / A6 Kegworth Bypass / Wilders Way

Junction Arm	
A	A453 (N)
B	A6 Kegworth Bypass
C	A453 (S)
D	Wilders Way

2022 Observed Flows (Lights AM)

	A	B	C	D
A	0	26	275	250
B	270	0	102	305
C	681	92	2	156
D	69	2	37	0

2022 Saturn Actual Flows (Lights AM)

	A	B	C	D
A	0	4	145	3
B	179	0	186	269
C	1098	155	0	370
D	20	15	29	0

GEH Comparison

	A	B	C	D
A	0	6	9	22
B	6	0	7	2
C	14	6	0	13
D	7	4	1	0

J10 - M1 J23 Slip Road / A512 / Ashby Road East

Junction Arm	
A	M1 J23 Slip Road (N)
B	A512
C	M1 J23 Slip Road (S)
D	Ashby Road (E)

2022 Observed Flows (Lights AM)

	A	B	C	D
A	0	741	0	289
B	444	0	127	338
C	0	383	0	0
D	242	671	108	0

2022 Saturn Actual Flows (Lights AM)

	A	B	C	D
A	0	217	0	431
B	155	0	124	713
C	0	125	0	337
D	312	219	215	0

GEH Comparison

	A	B	C	D
A	0	24	0	7
B	17	0	0	16
C	0	16	0	26
D	4	21	8	0

J1 - A453 / Walton Hill

Junction Arm	
A	Northern Arm
B	A453
C	Walton Hill

2022 Observed Flows (Lights PM)

	A	B	C
A	0	208	277
B	325	0	270
C	213	181	0

2022 Saturn Actual Flows (Lights PM)

	A	B	C
A	0	245	353
B	382	0	284
C	322	193	0

GEH Comparison

	A	B	C
A	0	2	4
B	3	0	1
C	7	1	0

J2 - A453 / East Midland Airport Access

Junction Arm	
A	East Midlands Airport Access
B	A453 (E)
C	A453(W)

2022 Observed Flows (Lights PM)

	A	B	C
A	0	220	65
B	125	0	397
C	37	317	0

2022 Saturn Actual Flows (Lights PM)

	A	B	C
A	0	57	252
B	10	0	415
C	95	337	0

GEH Comparison

	A	B	C
A	0	14	15
B	14	0	1
C	7	1	0

J3 - A453 / Hunter Road

Junction Arm	
A	Hunter Road
B	A453 (E)
C	A453 (W)

2022 Observed Flows (Lights PM)

	A	B	C
A	0	335	34
B	110	0	488
C	28	509	0

2022 Saturn Actual Flows (Lights PM)

	A	B	C
A	0	476	0
B	136	0	447
C	0	582	0

GEH Comparison

	A	B	C
A	0	7	8
B	2	0	2
C	7	3	0

J4 - A453 / M1 J23A Access / Donnington Services

Junction Arm	
A	A453 (N)
B	M1 J23A Access
C	Donnington Services Access
D	A453 (W)

2022 Observed Flows (Lights PM)

	A	B	C	D
A	0	332	62	154
B	700	0	111	402
C	76	109	0	52
D	568	239	47	0

2022 Saturn Actual Flows (Lights PM)

	A	B	C	D
A	0	385	0	209
B	1201	0	0	338
C	0	0	0	0
D	491	566	0	0

GEH Comparison

	A	B	C	D
A	0	3	11	4
B	16	0	15	3
C	0	15	0	10
D	3	16	10	0

J5 - A453 / Derby Road / M1 J24 / A50

Junction Arm	
A	M1 J24 (N)
B	A453 (N)
C	Derby Road
D	M1 J24 (S)
E	A453 (S)
F	A50
G	Hilton Hotel Lane

2022 Observed Flows (Lights PM)

	A	B	C	D	E	F	G
A	0	857	530	4	160	218	10
B	247	0	73	777	270	379	11
C	87	56	0	50	86	129	2
D	0	489	67	0	4	978	14
E	309	242	40	35	0	926	5
F	0	0	0	0	0	0	0
G	15	20	10	8	4	11	0

2022 Saturn Actual Flows (Lights PM)

	A	B	C	D	E	F	G
A	0	754	578	0	233	0	0
B	138	0	0	936	164	644	68
C	285	0	0	0	0	347	22
D	0	662	112	0	83	584	55
E	271	116	24	81	0	1156	19
F	0	0	0	0	0	0	0
G	39	58	21	27	8	0	0

GEH Comparison

	A	B	C	D	E	F	G
A	0	4	2	3	5	21	4
B	8	0	12	5	7	12	9
C	15	11	0	10	13	14	6
D	0	7	5	0	12	14	7
E	2	9	3	6	0	7	4
F	0	0	0	0	0	0	0
G	5	6	3	5	2	5	0

J6 - A453 / Northern Arm

Junction Arm	
A	Northern Arm
B	A453 (E)
C	A453 (W)

2022 Observed Flows (Lights PM)

	A	B	C
A	0	144	207
B	67	0	342
C	110	246	0

2022 Saturn Actual Flows (Lights PM)

	A	B	C
A	0	46	309
B	110	0	273
C	332	116	0

GEH Comparison

	A	B	C
A	0	10	6
B	5	0	4
C	15	10	0

J7 - A453 / The Green

Junction Arm	
A	A453 (E)
B	The Green
C	A453 (W)

2022 Observed Flows (Lights PM)

	A	B	C
A	0	12	357
B	14	0	58
C	286	104	0

2022 Saturn Actual Flows (Lights PM)

	A	B	C
A	0	130	285
B	97	0	139
C	241	153	0

GEH Comparison

	A	B	C
A	0	14	4
B	11	0	8
C	3	4	0

J8 - A453 / Grimes Gate

Junction Arm	
A	A453 (E)
B	Grimes Gate
C	A453 (W)

2022 Observed Flows (Lights PM)

	A	B	C
A	0	70	360
B	28	0	9
C	288	12	0

2022 Saturn Actual Flows (Lights PM)

	A	B	C
A	0	27	415
B	17	0	0
C	338	0	0

GEH Comparison

	A	B	C
A	0	6	3
B	2	0	4
C	3	5	0

J9 - A453 / A6 Kegworth Bypass / Wilders Way

Junction Arm	
A	A453 (N)
B	A6 Kegworth Bypass
C	A453 (S)
D	Wilders Way

2022 Observed Flows (Lights PM)

	A	B	C	D
A	5	57	209	193
B	288	0	95	294
C	665	146	0	42
D	149	15	73	0

2022 Saturn Actual Flows (Lights PM)

	A	B	C	D
A	0	238	198	42
B	393	0	355	27
C	1516	61	0	87
D	373	126	173	0

GEH Comparison

	A	B	C	D
A	0	15	1	14
B	6	0	17	21
C	26	8	0	6
D	14	13	9	0

J10 - M1 J23 Slip Road / A512 / Ashby Road East

Junction Arm	
A	M1 J23 Slip Road (N)
B	A512
C	M1 J23 Slip Road (S)
D	Ashby Road (E)

2022 Observed Flows (Lights PM)

	A	B	C	D
A	0	394	0	155
B	469	0	341	496
C	0	185	0	122
D	204	373	114	0

2022 Saturn Actual Flows (Lights PM)

	A	B	C	D
A	0	305	0	348
B	258	0	119	401
C	0	182	0	243
D	311	467	340	0

GEH Comparison

	A	B	C	D
A	0	5	0	12
B	11	0	15	4
C	0	0	0	9
D	7	5	15	0

J1 - A453 / Walton Hill

Junction Arm	
A	Northern Arm
B	A453
C	Walton Hill

2022 Observed Flows (Heavies AM)

	A	B	C
A	0	45	23
B	25	0	28
C	15	33	0

2022 Saturn Actual Flows (Heavies AM)

	A	B	C
A	0	0	4
B	0	0	20
C	1	40	0

GEH Comparison

	A	B	C
A	0	9	5
B	7	0	2
C	5	1	0

J2 - A453 / East Midland Airport Access

Junction Arm	
A	East Midlands Airport Access
B	A453 (E)
C	A453(W)

2022 Observed Flows (Heavies AM)

	A	B	C
A	0	5	2
B	1	0	39
C	1	1	0

2022 Saturn Actual Flows (Heavies AM)

	A	B	C
A	0	0	3
B	0	0	17
C	8	32	0

GEH Comparison

	A	B	C
A	0	3	1
B	1	0	4
C	3	8	0

J3 - A453 / Hunter Road

Junction Arm	
A	Hunter Road
B	A453 (E)
C	A453 (W)

2022 Observed Flows (Heavies AM)

	A	B	C
A	0	18	0
B	17	0	40
C	1	60	0

2022 Saturn Actual Flows (Heavies AM)

	A	B	C
A	0	8	0
B	36	0	39
C	0	34	0

GEH Comparison

	A	B	C
A	0	3	####
B	4	0	0
C	1	4	0

J4 - A453 / M1 J23A Access / Donnington

Junction Arm	
A	A453 (N)
B	M1 J23A Access
C	Donnington Services Access
D	A453 (W)

2022 Observed Flows (Heavies AM)

	A	B	C	D
A	0	74	10	25
B	124	0	32	27
C	48	23	0	5
D	40	36	2	0

2022 Saturn Actual Flows (Heavies AM)

	A	B	C	D
A	0	65	0	20
B	362	0	0	54
C	0	0	0	0
D	39	3	0	0

GEH Comparison

	A	B	C	D
A	0	1	4	1
B	15	0	8	4
C	10	7	0	3
D	0	7	2	0

J5 - A453 / Derby Road / M1 J24 / A50

Junction Arm	
A	M1 J24 (N)
B	A453 (N)
C	Derby Road
D	M1 J24 (S)
E	A453 (S)
F	A50
G	Hilton Hotel Lane

2022 Observed Flows (Heavies AM)

	A	B	C	D	E	F	G
A	0	80	21	0	51	34	0
B	25	0	1	60	43	34	0
C	0	2	0	5	1	13	0
D	0	70	11	0	2	193	0
E	36	21	3	19	0	111	0
F						0	
G	0	0	0	0	0	0	0

2022 Saturn Actual Flows (Heavies AM)

	A	B	C	D	E	F	G
A	0	103	3	0	306	0	2
B	11	0	0	75	80	87	0
C	0	0	0	0	0	0	0
D	0	90	0	0	0	109	3
E	177	50	0	0	0	169	2
F	0	0	0	0	0	0	0
G	0	0	0	1	1	1	0

GEH Comparison

	A	B	C	D	E	F	G
A	0	2	5	0	19	8	2
B	3	0	1	2	5	7	0
C	0	2	0	3	1	5	0
D	0	2	5	0	2	7	2
E	14	5	2	6	0	5	2
F	0	0	0	0	0	0	0
G	0	0	0	1	1	1	0

J6 - A453 / Northan Arm

Junction Arm	
A	Northern Arm
B	A453 (E)
C	A453 (W)

2022 Observed Flows (Heavies AM)

	A	B	C
A	0	11	16
B	7	0	23
C	16	30	0

2022 Saturn Actual Flows (Heavies AM)

	A	B	C
A	0	3	29
B	0	0	5
C	17	22	0

GEH Comparison

	A	B	C
A	0	3	3
B	4	0	5
C	0	2	0

J7 - A453 / The Green

Junction Arm	
A	A453 (E)
B	The Green
C	A453 (W)

2022 Observed Flows (Heavies AM)

	A	B	C
A	0	1	30
B	1	0	0
C	39	2	0

2022 Saturn Actual Flows (Heavies AM)

	A	B	C
A	0	0	17
B	0	0	0
C	32	0	0

GEH Comparison

	A	B	C
A	0	1	3
B	1	0	0
C	1	2	0

J8 - A453 / Grimes Gate

Junction Arm	
A	A453 (E)
B	Grimes Gate
C	A453 (W)

2022 Observed Flows (Heavies AM)

	A	B	C
A	0	0	31
B	1	0	0
C	40	0	0

2022 Saturn Actual Flows (Heavies AM)

	A	B	C
A	0	0	17
B	0	0	0
C	32	0	0

GEH Comparison

	A	B	C
A	0	0	3
B	1	0	0
C	1	0	0

J9 - A453 / A6 Kegworth Bypass / Wilders Way

Junction Arm	
A	A453 (N)
B	A6 Kegworth Bypass
C	A453 (S)
D	Wilders Way

2022 Observed Flows (Heavies AM)

	A	B	C	D
A	3	20	17	26
B	11	0	3	16
C	65	7	0	28
D	21	2	21	0

2022 Saturn Actual Flows (Heavies AM)

	A	B	C	D
A	0	25	18	326
B	54	0	3	22
C	45	33	0	323
D	308	66	68	0

GEH Comparison

	A	B	C	D
A	0	1	0	23
B	8	0	0	1
C	3	6	0	22
D	22	11	7	0

J10 - M1 J23 Slip Road / A512 / Ashby Road East

Junction Arm	
A	M1 J23 Slip Road (N)
B	A512
C	M1 J23 Slip Road (S)
D	Ashby Road (E)

2022 Observed Flows (Heavies AM)

	A	B	C	D
A	0	27	0	44
B	25	0	17	20
C	0	20	0	22
D	24	32	12	0

2022 Saturn Actual Flows (Heavies AM)

	A	B	C	D
A	0	6	0	103
B	12	0	2	47
C	0	2	0	14
D	13	47	15	0

GEH Comparison

	A	B	C	D
A	0	5	0	7
B	3	0	5	5
C	0	5	0	2
D	3	2	1	0

J1 - A453 / Walton Hill

Junction Arm	
A	Northern Arm
B	A453
C	Walton Hill

2022 Observed Flows (Heavies PM)

	A	B	C
A	0	10	6
B	9	0	9
C	7	3	0

2022 Saturn Actual Flows (Heavies PM)

	A	B	C
A	0	0	0
B	0	0	20
C	0	11	0

GEH Comparison

	A	B	C
A	0	4	3
B	4	0	3
C	4	3	0

J2 - A453 / East Midland Airport Access

Junction Arm	
A	East Midlands Airport Access
B	A453 (E)
C	A453(W)

2022 Observed Flows (Heavies PM)

	A	B	C
A	0	2	0
B	4	0	23
C	2	15	0

2022 Saturn Actual Flows (Heavies PM)

	A	B	C
A	0	0	3
B	0	0	17
C	1	10	0

GEH Comparison

	A	B	C
A	0	2	2
B	3	0	1
C	1	1	0

J3 - A453 / Hunter Road

Junction Arm	
A	Hunter Road
B	A453 (E)
C	A453 (W)

2022 Observed Flows (Heavies PM)

	A	B	C
A	0	19	1
B	16	1	26
C	0	17	0

2022 Saturn Actual Flows (Heavies PM)

	A	B	C
A	0	7	0
B	4	0	20
C	0	24	0

GEH Comparison

	A	B	C
A	0	3	1
B	4	0	1
C	0	2	0

J4 - A453 / M1 J23A Access / Donnington

Junction Arm	
A	A453 (N)
B	M1 J23A Access
C	Donnington Services Access
D	A453 (W)

2022 Observed Flows (Heavies PM)

	A	B	C	D
A	0	35	26	24
B	71	0	27	18
C	12	15	0	1
D	19	14	4	0

2022 Saturn Actual Flows (Heavies PM)

	A	B	C	D
A	0	91	0	13
B	207	0	0	8
C	0	0	0	0
D	29	2	0	0

GEH Comparison

	A	B	C	D
A	0	7	7	3
B	12	0	7	3
C	5	5	0	1
D	2	4	3	0

J5 - A453 / Derby Road / M1 J24 / A50

Junction Arm	
A	M1 J24 (N)
B	A453 (N)
C	Derby Road
D	M1 J24 (S)
E	A453 (S)
F	A50
G	Hilton Hotel Lane

2022 Observed Flows (Heavies PM)

	A	B	C	D	E	F	G
A	0	50	15	0	22	22	0
B	16	0	1	36	24	26	0
C	0	1	0	1	2	6	0
D	0	39	9	0	1	111	0
E	14	14	1	7	0	73	0
F						0	
G	0	0	0	0	0	0	0

2022 Saturn Actual Flows (Heavies PM)

	A	B	C	D	E	F	G
A	0	54	0	0	167	0	1
B	4	0	0	65	52	52	0
C	0	0	0	0	0	0	0
D	0	45	0	0	0	48	1
E	121	70	0	0	0	162	1
F	0	0	0	0	0	0	0
G	0	0	0	1	1	0	0

GEH Comparison

	A	B	C	D	E	F	G
A	0	1	5	0	15	7	1
B	4	0	1	4	5	4	0
C	0	1	0	1	2	3	0
D	0	1	4	0	1	7	1
E	13	9	1	4	0	8	1
F	0	0	0	0	0	0	0
G	0	0	0	1	1	0	0

J6 - A453 / Northon Arm

Junction Arm	
A	Northern Arm
B	A453 (E)
C	A453 (W)

2022 Observed Flows (Heavies PM)

	A	B	C
A	0	9	7
B	13	0	11
C	12	6	0

2022 Saturn Actual Flows (Heavies PM)

	A	B	C
A	0	0	10
B	0	0	14
C	17	4	0

GEH Comparison

	A	B	C
A	0	4	1
B	5	0	1
C	1	1	0

J7 - A453 / The Green

Junction Arm	
A	A453 (E)
B	The Green
C	A453 (W)

2022 Observed Flows (Heavies PM)

	A	B	C
A	0	0	24
B	0	0	0
C	15	0	0

2022 Saturn Actual Flows (Heavies PM)

	A	B	C
A	0	0	17
B	0	0	0
C	10	0	0

GEH Comparison

	A	B	C
A	0	0	2
B	0	0	0
C	1	0	0

J8 - A453 / Grimes Gate

Junction Arm	
A	A453 (E)
B	Grimes Gate
C	A453 (W)

2022 Observed Flows (Heavies PM)

	A	B	C
A	0	2	24
B	0	0	0
C	15	0	0

2022 Saturn Actual Flows (Heavies PM)

	A	B	C
A	0	0	17
B	0	0	0
C	10	0	0

GEH Comparison

	A	B	C
A	0	2	2
B	0	0	0
C	1	0	0

J9 - A453 / A6 Kegworth Bypass / Wilders Way

Junction Arm	
A	A453 (N)
B	A6 Kegworth Bypass
C	A453 (S)
D	Wilders Way

2022 Observed Flows (Heavies PM)

	A	B	C	D
A	0	5	30	14
B	5	0	6	8
C	54	4	0	28
D	19	2	26	0

2022 Saturn Actual Flows (Heavies PM)

	A	B	C	D
A	0	27	14	176
B	46	0	1	46
C	26	13	0	192
D	420	118	114	0

GEH Comparison

	A	B	C	D
A	0	6	3	17
B	8	0	3	7
C	4	3	0	16
D	27	15	11	0

J10 - M1 J23 Slip Road / A512 / Ashby Road East

Junction Arm	
A	M1 J23 Slip Road (N)
B	A512
C	M1 J23 Slip Road (S)
D	Ashby Road (E)

2022 Observed Flows (Heavies PM)

	A	B	C	D
A	0	7	0	16
B	11	0	5	12
C	0	9	0	23
D	7	8	2	0

2022 Saturn Actual Flows (Heavies PM)

	A	B	C	D
A	0	5	0	17
B	9	0	0	26
C	0	3	0	5
D	16	22	4	0

GEH Comparison

	A	B	C	D
A	0	1	0	0
B	1	0	3	3
C	0	2	0	5
D	3	4	1	0

APPENDIX 50: VISSIM Forecast Modelling Report (document reference EMG2-BWB-GEN-XX-RP-TR-0019_S2-P2)

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1. INTRODUCTION

1.1 BWB Consulting Ltd (BWB) has been appointed by SEGRO (the Applicant) to produce a microsimulation traffic model of the M1 Junction 24 and Strategic Road Network in the vicinity, to support a DCO application for the Phase 2 Expansion of East Midlands Gateway 2 development (EMG2).

1.2 The EMG2 Project comprises a second phase to Segro's EMG1 logistics park and Rail Freight Interchange. The applications comprise the following three interrelated component parts:

Development Consent Order (DCO) Application

- **EMG2 Works** – A new logistics and advanced manufacturing employment park on the EMG2 Main Site located to the south of East Midlands Airport and the A453, and west of the M1 motorway. This part of the Scheme falls within the 'East Midlands Airport and Gateway Industrial Cluster' (EMAGIC), which is part of the East Midlands Freeport designated by the Government in 2022. It comprises 300,000sqm of B2/B8 Use Class, plus an allowance for 200,000sqm of B8 mezzanine floorspace; together with HGV parking and a bus interchange, an upgrade to the EMG1 substation and the provision of a community park;

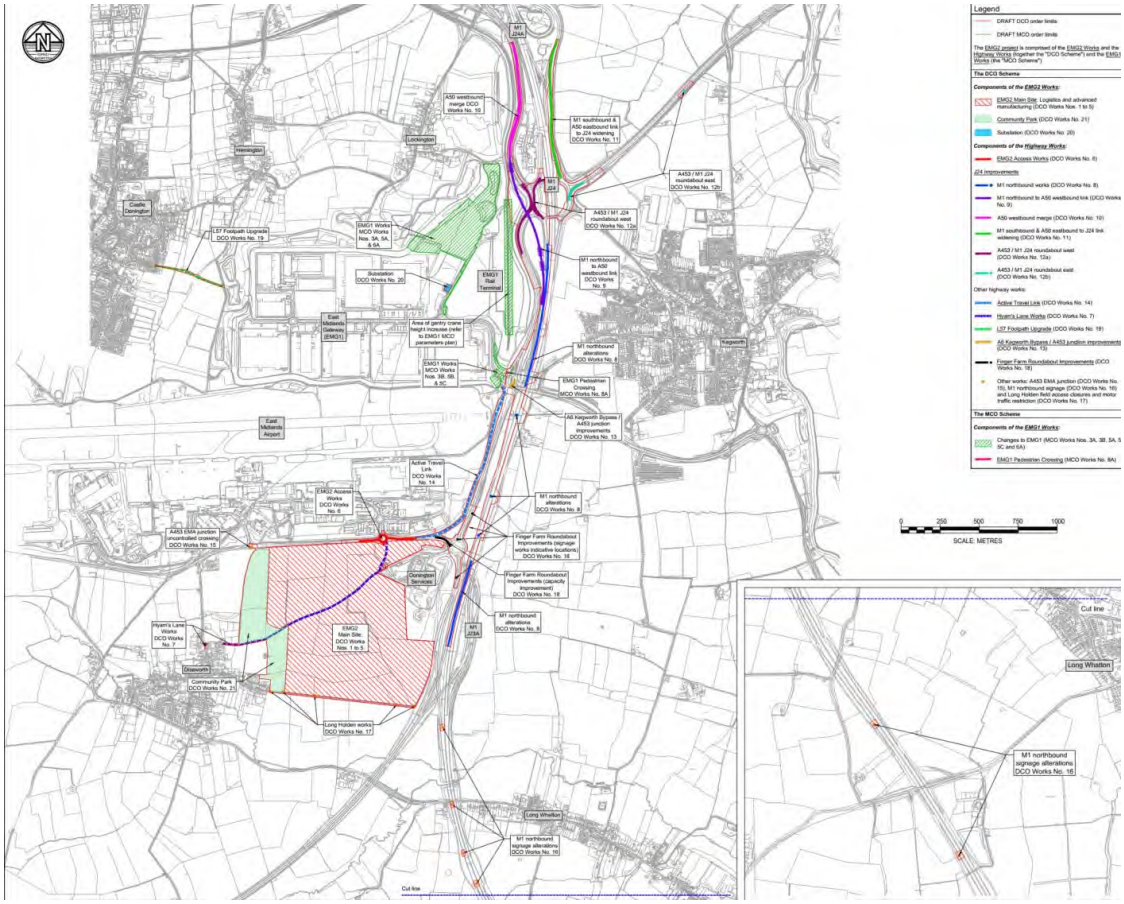
- **Highways Works** – the A453 EMG2 access junction works (referred to as the EMG2 Access Works); significant improvements at Junction 24 of the M1 (referred to as the J24 Improvements), works to the wider highway network including the Active Travel Link, Hyam's Lane Works, L57 Footpath Upgrade, A6 Kegworth Bypass/A453 Junction Improvements and Finger Farm Roundabout Improvements; and

Material Change Order (MCO) Application

- **EMG1 Works** – Additional warehousing unit of 26,500sqm plus a mezzanine allowance for 3,500 sqm (Use Class B8) at Plot 16 of EMG1, together with works to increase the permitted height of the gantry cranes at the rail freight terminal, improvements to the EMG1 public transport interchange, and site management building and addition of a pedestrian crossing near the entrance to EMG1.

1.3 The location of the proposed development is show in **Figure 1**.

Figure 1. Site Location



1.4 A VISSIM model has been developed for the M1 J24 corridor and a Local Model Validation Report (LMVR) was produced within Technical Note EMG2-BWB-GEN-XX-RP-TR-0006 Revision ~~P5 (**Appendix 1**)~~P6 which is included with appendix 4 and issued to the TWG in consultation with National Highways (NH) and Leicestershire County Council (LCountyC). The report concluded that the model calibrates well against observed and modelled turning movements during both peak hours at 15-minute intervals in line with Department for Transport guidelines and as a result satisfied the validation criteria.

1.5 The base model was subsequently agreed with NH within the Stage 1A Modelling sign off sheet with LCountyC and Nottinghamshire County Council (NCountyC) agreeing to defer to National Highways (NH) on this element. LCountyC has subsequently undertook a review of the base VISSIM model and have confirmed it is approved.

1.6 Revision 2 of this forecasting report was included within the Transport Assessment that was formally included within the DCO submission. Since the original DCO submission, NH and LCC have provided comments both on the Stage 2 VISSIM model and the forecasting reports contents. NH comments related to coding of proposed mitigation to ensure these align with the proposed drawings and updates of the MOVA control files to include for any additional lanes proposed. LCC requested convergence details of each modelling scenario as well as additional outputs including the following:

- Distance-Time Journey Time Graphs;

- Thematic Mapping to show zones with latent demand;
- Flow diagrams for all modelling scenarios;
- Base model outputs to be included in the comparison tables for journey times, queues and network performance statistics.

1.7 As a result, this forecasting report now summarises the latest modelling outputs incorporating NH model coding changes and also provides additional reporting on those outputs as requested by LCC.

1.8 Following this introduction, the remainder of this report is structured as follows:

- **Section 2:** sets out the modelling background – modelling extents, assessment scenarios, traffic flows and journey time routes
- **Section 3:** sets out the Stage 1A and 1B VISSIM modelling outcomes
- **Section 4:** sets out proposed highway mitigation and modelling results comparison between with and without the proposed development and mitigation.
- **Section 5:** sets out the Stage 2A and 2B PRTM outputs and VISSIM Modelling results
- **Section 6:** sets out the summary and conclusions.

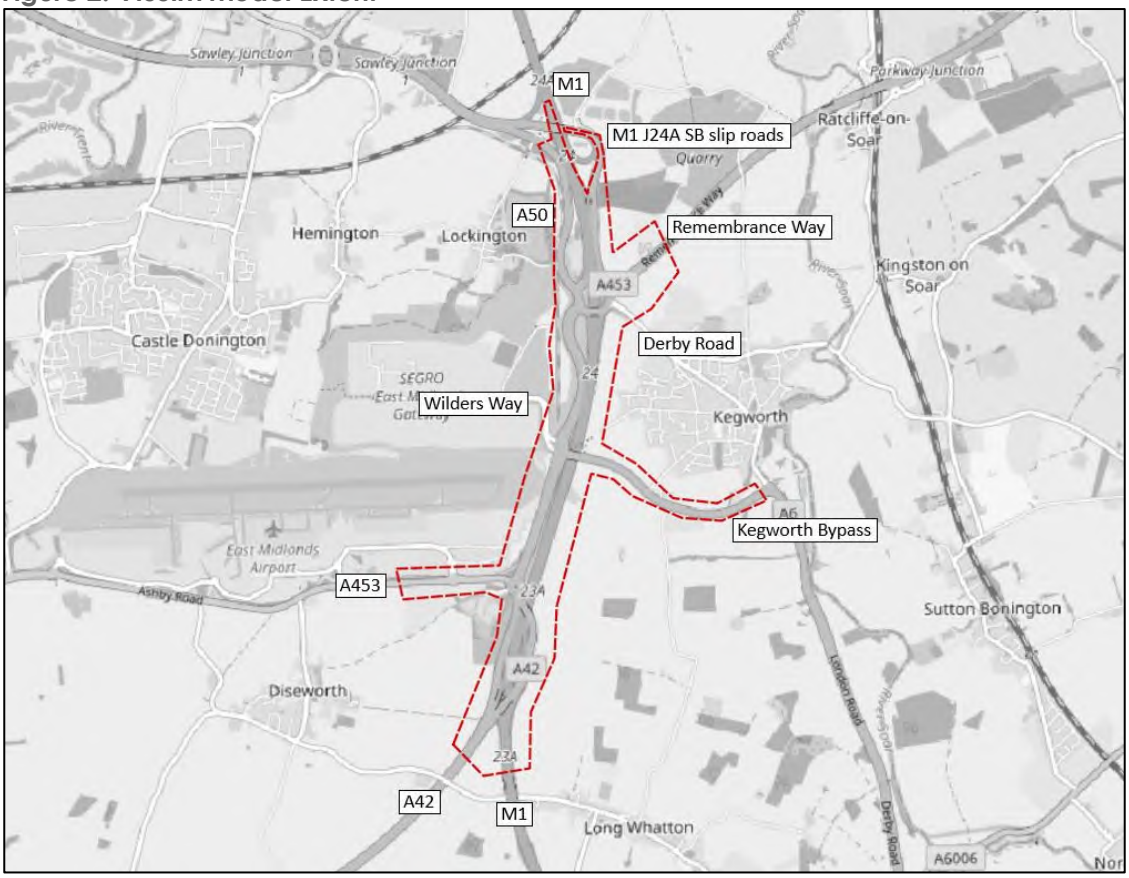
2. MODELLING BACKGROUND

VISSIM Modelling

2.1 It was agreed with the TWG that the following four junctions are tested using microsimulation VISSIM modelling because of their proximity to the SRN. The VISSIM model extent is shown at **Figure 2**.

- Junction 2: A453/Hunter Road Roundabout
- Junction 3: Finger Farm Roundabout
- Junction 4: A453/EMG1 Signal Gyratory
- Junction 5: M1 Junction 24

Figure 2. VISSIM Model Extent



Forecast Years & Assessment Criteria

2.2 It has been agreed with the TWG that a forecast base year of 2022 should be adopted (aligning with the year traffic surveys were undertaken) and forecast years of 2028 and 2038, reflecting the year of opening and post 10 years. The forecast year modelling has been undertaken in four stages, referred to as 'Stage 1A/2A modelling' and 'Stage 1B/2B modelling'. The stages adopt slightly different planning data assumptions in the uncertainty logs and baseline traffic, as summarised below.

- **Stage 1A modelling** (Proforma v14, Uncertainty Log v7) = 2028/2038 forecast years with and without EMG2, including, consented and committed sites as well as draft Local Plan allocation sites and Ratcliffe on Soar Power Station Uniper site, which is authorised by a Local Development Order (LDO).

- **Stage 1B modelling** (Proforma v14a, Uncertainty Log v7a) = 2028/2038 forecast years with and without EMG2, including consented and committed sites but excluding the draft Local Plan allocation sites and Ratcliffe on Soar Power Station Uniper Site (beyond the elements which are currently able to proceed under the LDO).

- **Stage 2A modelling** = as per Stage 1A but with the inclusion of the proposed Highway Works.
- **Stage 2B modelling** = as per Stage 1B but with the inclusion of the proposed Highway Works.

2.3 The difference between Stage 1A/2A and 1B/2B is the inclusion (1A/2A) or exclusion (1B/2B) of the EMIP site, Ratcliffe on Soar Power Station Uniper site redevelopment proposals over and above that permitted in the LDO, and the draft Local Plan allocation sites in the baseline, which represent the following projects:

- Isley Woodhouse (W1)

- Land North and South of Park Lane, Castle Donington (CD10)

- Land West of Hilltop Farm, Castle Donington (EMP89)

- Land North of J11/M42 (EMP82)

- Land North of Remembrance Way, Kegworth (EMP73)

- Land North of Derby Road, Kegworth (EMP73)

2.4 Technical Note EMG2-BWB-GEN-XX-RP-TR-0017 Revision P4 included in Appendix 17 of the TA sets out the basis for the four stage approach to modelling and the policy context for it, which can be summarised as follows:

- Stage 1A/2A modelling complies with the TWG interpretation of the TAG M4 Guidance

- Stage 1B/2B modelling complies with the guidance in Circular 01/2022 and Institute of Environmental Management and Assessment 2024.

2.5 The Stage 1A/2A modelling provides a highly robust assessment as it includes traffic from the draft Local Plan allocations but not any associated highway mitigation. This is with the exception of the proposed re-alignment of the A453 around the Isley Woodhouse draft allocation, which is included in the Uncertainty Log v7 because it forms part of the access strategy for that development.

2.6 The planning data assumptions and highway schemes included in the Uncertainty Log v7 (Stage 1A) and v7a (Stage 1B) were discussed and agreed with the TWG and relevant Local Planning Authorities. The committed and consented schemes and draft Local Plan allocations have been profiled out within the uncertainty logs in accordance with the Local Planning Authority's understanding of when they are likely to be built out.

2.7 The core scenario for the TA adopts the outputs from the Stage 1A/2A modelling, inclusive of draft Local Plan allocation sites. A sensitivity test will be carried out on a smaller number of junctions using Stage 1B/2B modelling, excluding draft Local Plan allocation sites due to the lack of mitigation measures included. This forecast report will therefore test the following scenarios:

- 2028 forecast opening year 'without development'
- 2028 forecast opening year 'with development'
- 2038 forecast future year 'without development'
- 2038 forecast future year 'with development'
- 2028 forecast future year with development with mitigation.
- 2038 forecast future year with development with mitigation.

2.8 Planned development growth is accounted for within the 'without development' scenarios as per the agreed Uncertainty Log v7. PRTM proforma v14 and Uncertainty Log v7 have been formally agreed with NH and NCountyC within the Stage 1A Modelling sign off sheet, whilst LCountyC confirmed they were accepted by email on 11 December 2024.

2.9 The 'with development' scenarios include the development on both EMG2 Main Site and Plot 16 of EMG1. A scenario has not been undertaken that considers EMG1 traffic in isolation, which is being applied for as a MCO to the current DCO. Plot 16 is expected to generate 53 two-way trips in the morning peak hour and 67 two-way trips in the evening peak hour, circa one per minute. This would have a negligible impact on the network and would not trigger the requirement for VISSIM modelling in isolation.

Deriving Future Forecast Traffic Flows

2.10 The PRTM model is validated at link flow level but not turning movement level and therefore a furnessing process has been carried out to derive future forecast traffic flows to be input into the Junctions 11, LinSig and VISSIM models.

2.11 BWB prepared Technical Note EMG2-BWB-GEN-XX-RP-TR-0004 Revision P7 setting out the methodology for deriving the future forecast traffic flows, which in summary involved the following process:

- Column adjustment: calculate turning counts across columns using survey data proportions in combination with the target link flow out of each arm.
- Sum row: calculate the sum of each arm row total.
- Row adjustment: calculate turning counts across rows using survey data proportions in combination with the target link flow into each arm.
- Sum column: calculate the sum of each column.
- Round all values in the matrix to the closest integer.
- Update sums for column and row total.
- Repeat the above 'x' number of iterations until the flows converge.

2.12 The macro has been built to run the furnessing 20 times for each matrix, however it should be noted that every time the macro is executed, it runs an additional 20 times. The furnessing spreadsheet therefore has been run for at least 20 iterations. The furnessing methodology has been double constrained, i.e. both origin and destination and the traffic flow matrices are furnessed until link flows are within a GEH of 5. This has been calculated by taking the absolute difference between the calculated target link flow and furnessed link flow. Should these be higher than a GEH of 5, the macro is executed until convergence is achieved. The furnessing process has been undertaken for the assessment years 2028 and 2038.

2.13 Due to high volumes of traffic that travel on the motorways and major A-roads there is the potential for these numbers to affect the furnessing outputs. As the furnessing process is based on turning proportions, the large motorway flows could cause the furnessing to assign traffic that would use the junctions to the motorway mainline movements instead.

2.14 Therefore, the M1 and A42 mainline flows were removed and furnessed separately to avoid any re-assignment and subsequently added back into the matrix after the furnessing process was complete.

2.15 PRTM, as a strategic highway model, re-routes traffic in response to congestion. To ensure the true impact of the development is modelled and fully mitigated, the development traffic was extracted from the PRTM model, and assigned manually to exclude the effects of any rerouting. The modelling therefore presents a highly robust assessment of the full impact of the proposed development trips.

Post Stage 2 Modelling

2.16 Stage 2 modelling comprises of 2028/38 forecast years with committed development, proposed development and Local Plan allocations with the proposed mitigation scheme that have been determined as a result of the Stage 1 VISSIM Modelling.

2.17 Upon receiving the Stage 2 PRTM outputs, furnessing was carried out using the above methodology but because the original methodology is based on the survey turning proportions it was not encapsulating the re-routing of traffic due to the mitigation strategy and provided unrealistic O-D Matrices.

2.18 Therefore, an alternative methodology has been used for the Stage 2 furnessing, which retains the Stage 1A furnessed flows and applies the difference between PRTM forecast flows for Stage 1A and Stage 2A. This accounts for the re-routing as a result of the mitigation while maintaining consistency in the matrix build process from Stage 1A. This approach has been discussed and agreed with NH.

Journey Time Routes

2.19 To determine the impact of the development on the highway network, journey time routes utilised for the validation have been retained to provide a comparison between the "with" and "without development" scenarios.

2.20 **Figures 3** and **4** show the routes utilised for journey time results.

Figure 3: Journey Time Routes (1 - 10)

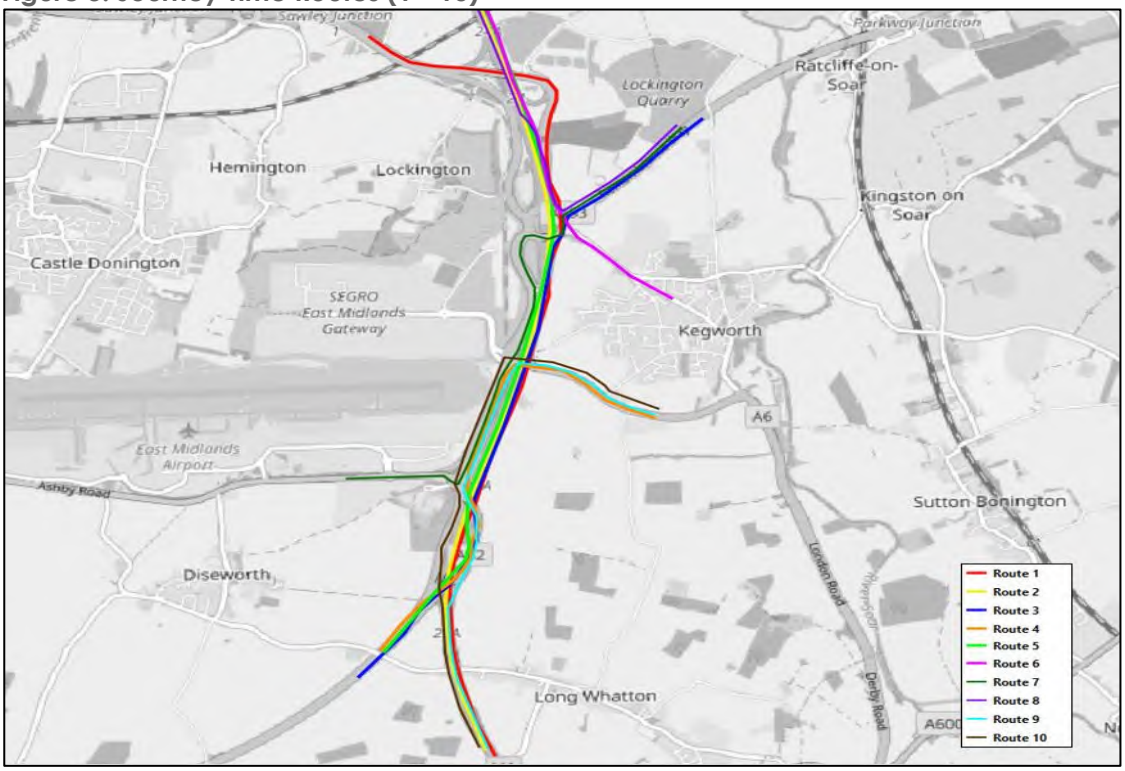
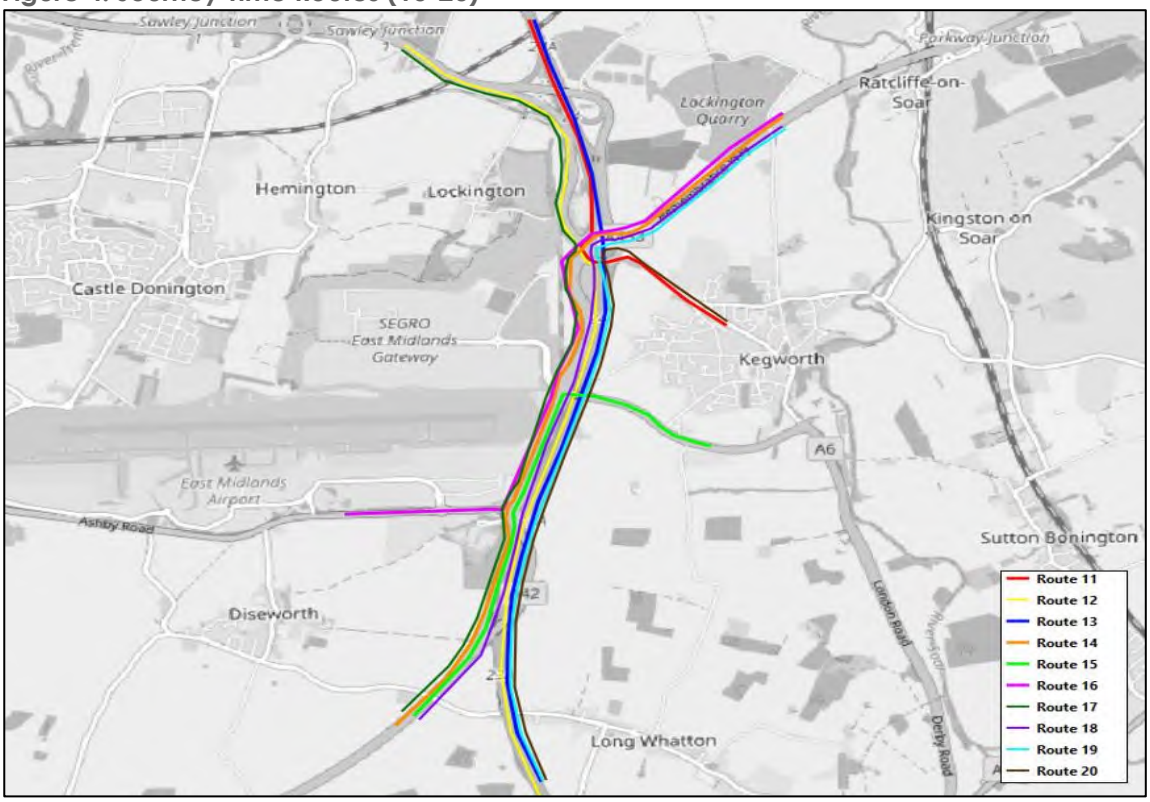


Figure 4: Journey Time Routes (10-20)



2.21 Details of the origin and destination of the routes identified above is provided below:

- Route 1 – A50 to M1 South
- Route 2 – M1 North to M1 South
- Route 3 – A453 Remembrance Way to A42
- Route 4 – Kegworth Bypass to A42
- Route 5 - M1 North to A42
- Route 6 – M1 North to Derby Road
- Route 7 – A453 Remembrance Way to A453 EMA
- Route 8 – M1 North to A453 Remembrance Way
- Route 9 – Kegworth Bypass to M1 South
- Route 10 - M1 South to Kegworth Bypass
- Route 11 – Derby Road to M1 North
- Route 12 – M1 South to A50
- Route 13 – M1 South to M1 North
- Route 14 – A42 to A453 Remembrance Way via A453
- Route 15 - A42 to Kegworth Bypass
- Route 16 – A453 EMA to A453 Remembrance Way
- Route 17 – A42 to A50 via A453
- Route 18 – A42 to A453 Remembrance Way via M1

- Route 19 – M1 South to A453 Remembrance Way via M1
- Route 20 - M1 South to Derby Road via M1

Convergence

2.22 In VISSIM, convergence is the process of repeatedly running a dynamic assignment model until the path costs, travel times, and volumes become stable and do not change significantly between runs. This is a crucial step to ensure the model's results are consistent and reliable for analysis. To achieve convergence, the model is run multiple times with a fixed random seed until the values stabilize.

2.23 For a model to be considered as converged, the following criteria must be met:

- 95% of all path traffic volumes change by less than 5% for at least four consecutive iterations; and
- 95% of travel times on all paths change by less than 20% for at least four consecutive iterations

2.24 This process has been undertaken for each scenario and the summaries are included with **Appendix 1**. Furthermore, traffic flows have been extracted from the converged models and presented in **Appendix 2**.

3. STAGE 1 VISSIM MODELLING

Introduction

3.1 The following section presents the results of the detailed junction modelling assessments for the Stage 1A core scenario and Stage 1B sensitivity forecast year scenarios using VISSIM.

Measurement of Capacity

3.2 The primary measurement of capacity in VISSIM is to conduct a journey time analysis between the without development and with development scenarios along with a comparison of predicted queues and a series of network performance indicators such as average delays, average speeds, number of vehicles entering the network and latent demand. Judgement is then required as to where significant impacts are occurring and subsequently where mitigation needs to be focussed.

Measurement of Impacts

3.3 The impacts of the EMG2 Project will be assessed against the policy contained within Paragraph 5.283 of the NPS, which states:

> *"The applicant should provide evidence that the development improves the operation of the network and assists with capacity issues"*

3.4 In addition the impacts of the EMG2 Project will be assessed against the policy contained within Paragraph 116 of the NPPF, which states:

> "*Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios*"

3.5 While the Stage 1A modelling accounts for both committed sites, EMIP, Ratcliffe on Soar and draft Local Plan allocation sites, it does not consider any forthcoming mitigation. Therefore, it is important to focus on the overall improvements to the M1 J24 highway network rather than on individual journey time changes.

Stage 1A VISSIM Results

Journey Time Comparison

3.6 **Table 1** and **2** show the journey time comparison between the "without development" and "with development" scenarios for the forecast years 2028 and 2038 respectively (NB WoD = without development and WD = with development in all relevant tables)

Table 1: Stage 1A 2028 Journey Time Comparison (Seconds)

	AM				PM			
Route	2024 Base	2028 WoD	2028 WD	WD - WoD	2024 Base	2028 WoD	2028 WD	WD - WoD
Route 1	353	358	418408	6050	331	341342	358	1716
Route 2	339	356	364363	87	317	324	338	14
Route 3	308	311312	318317	75	301317	413438	427435	14-3
Route 4	306	307304	332335	2431	295293	290288	318324	2936
Route 5	323	338	344	6	309310	315	324	9
Route 6	272	294293	325323	3230	253292	259	265266	67
Route 7	400	399396	378	-2118	365381	473498	468477	-421
Route 8	278	302	341338	3836	254270	262	279280	1718
Route 9	316	319315	349352	3037	300297	295294	344350	4956
Route 10	355	337332	378382	4150	317315	333336	386	5350
Route 11	349	379	389	10	339341	374372	406405	3233
Route 12	354	650665	689686	3921	346348	454439	460465	626
Route 13	337	431436	456459	2523	349	397396	412413	1517
Route 14	423	489	539546	5057	387402	396395	451456	5461
Route 15	333	312309	364368	5259	284282	284287	337338	5351
Route 16	397	471468	517522	4654	361376	371370	465470	94100
Route 17	354	378377	430435	5258	338337	334333	396399	6266
Route 18	357	665694	765769	10175	332347	465449	463471	-222
Route 19	375	659670	704702	4632	364380	517500	513522	-422
Route 20	377	659670	701700	4230	370408	519502	506514	-1312

Table 2: Stage 1A 2038 Journey Time Comparison (Seconds)

	AM				PM			
Route	2024 Base	2038 WoD	2038 WD	WD - WoD	2024 Base	2038 WoD	2038 WD	WD - WoD
Route 1	353	485493	591593	106100	331	345	363362	1817
Route 2	339	364363	368367	4	317	327326	342341	15
Route 3	308	565575	753749	188174	301317	896914	922929	2615
Route 4	306	331336	411398	8062	295293	303306	338335	3529
Route 5	323	342	348347	5	309310	319	330329	1110
Route 6	272	323328	365366	4238	253292	266	274	8
Route 7	400	650663	807804	157141	365381	959977	964971	5-6
Route 8	278	331336	380	4944	254270	269	289288	19
Route 9	316	344348	427416	8368	300297	308310	362359	5449
Route 10	355	490489	615613	125124	317315	333334	382	4948
Route 11	349	406403	407	14	339341	380377	409410	2833
Route 12	354	712701	731734	1833	346348	388	416411	2823
Route 13	337	457	479482	2325	349	390	413	23
Route 14	423	806781	953921	147140	387402	413412	476472	6360
Route 15	333	469470	653646	183176	284282	286287	334	4847
Route 16	397	10281003	915891	-114112	361376	395393	559556	164163

	AM				PM			
Route	2024 Base	2038 WoD	2038 WD	WD - WoD	2024 Base	2038 WoD	2038 WD	WD - WoD
Route 17	354	~~579~~556	~~747~~730	~~168~~174	~~338~~337	~~340~~339	~~405~~401	~~65~~62
Route 18	357	830	~~910~~914	~~81~~84	~~332~~347	~~404~~400	~~435~~429	~~31~~29
Route 19	375	~~809~~797	~~832~~837	~~23~~40	~~364~~380	~~454~~451	~~487~~481	~~32~~30
Route 20	377	~~810~~802	~~828~~836	~~18~~34	~~370~~408	~~461~~460	~~483~~476	~~21~~16

3.7 **Tables 1** and **2** show that there are significant increases in journey times between the 'without development' and 'with development' scenarios particularly at Finger Farm roundabout, EMG1 Gyratory and M1 J24.

3.8 A review of the VISSIM simulation indicates that the M1 northbound off-slip becomes significantly congested under the forecast years without development scenarios, with queues extending back past Junction 23A. This issue is exacerbated in the forecast years with development scenarios, reducing the number of vehicles able to reach M1 J24.

3.9 This is shown in **Tables 3** and **4** which summarise the ~~average~~mean maximum and maximum queues for the 2028 without and with development scenarios.

Table 3: Stage 1A 2028 ~~Average~~Mean Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	24	50	91	40	22	21	45	25
2	Finger Farm	A453 N	20	28	44	16	13	15	28	13
3	Finger Farm	M1/A42 S	35	63	125	61	19	17	21	4
11	M1 J24	M1/A50	194	292	923	631	90	120	121	1
12	M1 J24	Remembrance Way	86	61	70	9	94	515	534	19
13	M1 J24	Deby Road	41	68	77	9	31	47	46	-1
15	M1 J24	A453 S	41	81	85	4	70	95	131	35
16	M1 J24	Hilton Hotel Lane	23	690	785	95	16	46	46	0
17	M1 J24	M1 NB South of Slip	2	1235	1312	78	0	372	78	-294
20	M1 J24	M1 NB Off Slip	95	916	972	55	51	496	414	-82
24	EMG1 Gyratory	Kegworth By-Pass	192	170	224	55	138	123	143	20
25	EMG1 Gyratory	A453 S	128	257	279	22	102	75	99	24
26	EMG1 Gyratory	Wilders Way L-Turn	4	6	11	4	6	8	12	4
27	EMG1 Gyratory	Wilders Way Ahead	3	7	8	1	6	8	9	2
28	EMG1 Gyratory	A453 S Left turn	65	82	80	-2	38	44	44	0
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	105	129	188	59	73	70	90	20
30	EMG1 Gyratory	A453 N	109	65	73	8	33	38	42	4

Mean Max Queues (m)			2028 AM				2028 PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	25	49	100	51	22	22	43	21
2	Finger Farm	A453 N	20	28	43	15	13	17	31	14
3	Finger Farm	M1/A42 S	40	67	140	73	19	18	22	4
11	M1 J24	M1/A50	169	262	419	157	91	121	124	3
12	M1 J24	Remembrance Way	90	61	72	11	95	578	556	-22
13	M1 J24	Deby Road	41	69	82	13	33	46	47	1
15	M1 J24	A453 S	39	85	91	6	68	88	138	50
16	M1 J24	Hilton Hotel Lane	23	603	782	179	15	46	47	1
17	M1 J24	M1 NB South of Slip	0	1446	1641	195	0	216	85	-131
20	M1 J24	M1 NB Off Slip	79	1159	898	-261	52	448	454	6
24	EMG1 Gyratory	Kegworth By-Pass	197	153	253	100	131	121	174	53
25	EMG1 Gyratory	A453 S	129	238	300	62	101	72	105	33
26	EMG1 Gyratory	Wilders Way L-Turn	7	4	10	6	7	9	11	2
27	EMG1 Gyratory	Wilders Way Ahead	3	5	8	3	6	8	10	2
28	EMG1 Gyratory	A453 S Left turn	63	87	104	17	37	42	45	3
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	124	122	226	104	79	85	114	29
30	EMG1 Gyratory	A453 N	113	63	75	12	36	38	44	6
31	M1 J24	M1 SB Offlip (M1)	0	14	137	123	0	0	0	0
32	M1 J24	M1 SB Offlip (A50)	0	38	669	631	0	0	0	0

Table 4: Stage 1A 2028 Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	30	65	186	121	32	25	72	47
2	Finger Farm	A453 N	29	32	59	27	27	20	39	18
3	Finger Farm	M1/A42 S	44	84	158	74	25	22	29	7
11	M1 J24	M1/A50	448	505	1312	808	114	144	142	-3
12	M1 J24	Remembrance Way	124	69	76	7	127	744	750	7
13	M1 J24	Deby Road	53	73	103	30	37	52	49	-2
15	M1 J24	A453 S	61	91	99	8	115	129	157	28
16	M1 J24	Hilton Hotel Lane	33	937	1016	79	23	52	57	5
17	M1 J24	M1 NB South of Slip	8	1924	2010	86	0	804	290	-514
20	M1 J24	M1 NB Off Slip	169	1185	1170	-15	64	608	605	-4
24	EMG1 Gyratory	Kegworth By-Pass	431	227	286	59	207	187	237	51
25	EMG1 Gyratory	A453 S	153	390	555	166	138	95	125	29
26	EMG1 Gyratory	Wilders Way L-Turn	12	10	17	7	17	11	19	8
27	EMG1 Gyratory	Wilders Way Ahead	7	10	10	-1	9	10	13	3
28	EMG1 Gyratory	A453 S Left turn	104	124	128	4	55	53	57	5
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	246	178	276	98	136	105	170	65
30	EMG1 Gyratory	A453 N	176	79	82	3	43	47	52	5

Maximum Queues (m)			2028 AM				2028 PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	39	75	198	123	30	35	67	32
2	Finger Farm	A453 N	48	40	47	7	20	23	39	16
3	Finger Farm	M1/A42 S	49	84	200	116	27	26	29	3
11	M1 J24	M1/A50	279	400	431	31	114	145	150	5
12	M1 J24	Remembrance Way	126	69	76	7	145	812	785	-27
13	M1 J24	Deby Road	55	84	105	21	39	55	55	0
15	M1 J24	A453 S	53	109	135	26	98	126	177	51
16	M1 J24	Hilton Hotel Lane	34	800	1037	237	25	52	62	10
17	M1 J24	M1 NB South of Slip	0	2409	3010	601	0	482	274	-208
20	M1 J24	M1 NB Off Slip	109	1691	1090	-601	62	582	587	5
24	EMG1 Gyratory	Kegworth By-Pass	423	212	359	147	182	242	272	30
25	EMG1 Gyratory	A453 S	197	386	608	222	118	90	152	62
26	EMG1 Gyratory	Wilders Way L-Turn	16	10	16	6	16	17	16	-1
27	EMG1 Gyratory	Wilders Way Ahead	6	8	12	4	10	11	12	1
28	EMG1 Gyratory	A453 S Left turn	105	137	187	50	47	50	56	6
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	255	171	321	150	146	162	181	19
30	EMG1 Gyratory	A453 N	202	72	84	12	52	53	60	7
31	M1 J24	M1 SB Offlip (M1)	0	38	229	191	0	0	0	0
32	M1 J24	M1 SB Offlip (A50)	0	189	1053	864	0	0	0	0

3.10 **Table 5** and **6** sets out the ~~average~~mean maximum and maximum queues for the 2038 without and with development scenarios.

Table 5: Stage 1A 2038 ~~Average~~Mean Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	24	579	582	3	22	57	322	265
2	Finger Farm	A453 N	20	27	27	0	13	21	33	13
3	Finger Farm	M1/A42 S	35	238	886	648	19	24	27	3
11	M1 J24	M1/A50	194	1631	1676	45	90	146	146	0
12	M1 J24	Remembrance Way	86	951	1437	486	94	1791	1833	42
13	M1 J24	Deby Road	41	72	76	3	31	52	52	0
15	M1 J24	A453 S	41	554	396	-158	70	105	151	46
16	M1 J24	Hilton Hotel Lane	23	1362	1363	1	16	223	285	62
17	M1 J24	M1 NB South of Slip	2	1611	1752	140	0	0	13	13
20	M1 J24	M1 NB Off Slip	95	609	629	20	51	182	203	21
24	EMG1 Gyratory	Kegworth By-Pass	192	321	860	539	138	205	279	75
25	EMG1 Gyratory	A453 S	128	1025	1098	73	102	105	139	34
26	EMG1 Gyratory	Wilders Way L-Turn	4	18	15	-3	6	11	14	3
27	EMG1 Gyratory	Wilders Way Ahead	3	10	8	-1	6	10	10	1
28	EMG1 Gyratory	A453 S Left turn	65	184	78	-106	38	41	40	-1
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	105	280	851	571	73	143	231	87
30	EMG1 Gyratory	A453 N	109	74	78	5	33	38	45	6

Mean Max Queues (m)			2038 AM				2038 PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	25	562	625	63	22	52	300	248
2	Finger Farm	A453 N	20	26	31	5	13	23	33	10
3	Finger Farm	M1/A42 S	40	216	908	692	19	25	29	4
11	M1 J24	M1/A50	169	428	430	2	91	146	151	5
12	M1 J24	Remembrance Way	90	971	1486	515	95	2209	2256	47
13	M1 J24	Deby Road	41	71	80	9	33	51	53	2
15	M1 J24	A453 S	39	479	258	-221	68	96	146	50
16	M1 J24	Hilton Hotel Lane	23	1370	1391	21	15	226	264	38
17	M1 J24	M1 NB South of Slip	0	1831	2196	365	0	2	0	-2
20	M1 J24	M1 NB Off Slip	79	654	799	145	52	163	187	24
24	EMG1 Gyratory	Kegworth By-Pass	197	357	756	399	131	226	265	39
25	EMG1 Gyratory	A453 S	129	1038	1108	70	101	104	124	20
26	EMG1 Gyratory	Wilders Way L-Turn	7	25	14	-11	7	14	15	1
27	EMG1 Gyratory	Wilders Way Ahead	3	10	9	-1	6	10	11	1
28	EMG1 Gyratory	A453 S Left turn	63	205	267	62	37	42	39	-3
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	124	316	747	431	79	170	199	29
30	EMG1 Gyratory	A453 N	113	84	77	-7	36	41	43	2
31	M1 J24	M1 SB Offlip (M1)	0	145	333	188	0	0	0	0
32	M1 J24	M1 SB Offlip (A50)	0	1321	2120	799	0	0	0	0

Table 6: Stage 1A 2038 Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	30	1062	898	-164	32	104	432	328
2	Finger Farm	A453 N	29	37	33	-4	27	29	42	13
3	Finger Farm	M1/A42 S	44	314	1334	1020	25	37	33	-3
11	M1 J24	M1/A50	448	1990	1828	-162	114	172	183	10
12	M1 J24	Remembrance Way	124	1346	1982	636	127	2010	2010	0
13	M1 J24	Deby Road	53	91	88	-4	37	62	58	-3
15	M1 J24	A453 S	61	912	595	-317	115	131	202	71
16	M1 J24	Hilton Hotel Lane	33	1645	1645	0	23	302	404	101
17	M1 J24	M1 NB South of Slip	8	1984	2009	25	0	2	86	83
20	M1 J24	M1 NB Off Slip	169	610	749	139	64	330	240	-90
24	EMG1 Gyratory	Kegworth By-Pass	431	389	1116	727	207	333	417	84
25	EMG1 Gyratory	A453 S	153	1231	1259	28	138	126	169	43
26	EMG1 Gyratory	Wilders Way L-Turn	12	32	28	-4	17	19	24	5
27	EMG1 Gyratory	Wilders Way Ahead	7	12	11	-1	9	13	12	0
28	EMG1 Gyratory	A453 S Left turn	104	206	105	-101	55	46	47	1
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	246	386	1116	730	136	232	327	95
30	EMG1 Gyratory	A453 N	176	82	85	3	43	45	51	7

Maximum Queues (m)			2038 AM				2038 PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	39	1011	988	-23	30	95	386	291
2	Finger Farm	A453 N	48	39	43	4	20	28	41	13
3	Finger Farm	M1/A42 S	49	301	1281	980	27	32	32	0
11	M1 J24	M1/A50	279	432	433	1	114	160	185	25
12	M1 J24	Remembrance Way	126	1349	2309	960	145	2778	2778	0
13	M1 J24	Deby Road	55	83	104	21	39	55	62	7
15	M1 J24	A453 S	53	811	359	-452	98	108	182	74
16	M1 J24	Hilton Hotel Lane	34	1645	1645	0	25	323	383	60
17	M1 J24	M1 NB South of Slip	0	2577	3008	431	0	9	0	-9
20	M1 J24	M1 NB Off Slip	109	828	850	22	62	269	227	-42
24	EMG1 Gyratory	Kegworth By-Pass	423	474	956	482	182	294	414	120
25	EMG1 Gyratory	A453 S	197	1237	1247	10	118	120	138	18
26	EMG1 Gyratory	Wilders Way L-Turn	16	40	31	-9	16	28	28	0
27	EMG1 Gyratory	Wilders Way Ahead	6	12	11	-1	10	13	13	0
28	EMG1 Gyratory	A453 S Left turn	105	428	322	-106	47	46	44	-2
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	255	438	956	518	146	245	317	72
30	EMG1 Gyratory	A453 N	202	101	82	-19	52	58	50	-8
31	M1 J24	M1 SB Offlip (M1)	0	198	439	241	0	0	2	2
32	M1 J24	M1 SB Offlip (A50)	0	1708	2308	600	0	0	0	0

Network Performance

3.11 **Table 7** sets out the network performance comparison for all scenarios at the 2028 forecast year.

Table 7: Stage 1A 2028 Network Performance Comparison

Peak Hour	Scenario	Delay (secss)	Speed (mph)	Veh Arr (veh)	Latent Delay (s)	Latent Demand (Veh)

AM	2024 Base	52	48.6	18740	1401	1
	2028 WoD	~~120~~121	40.~~2~~1	~~2102~~821027	~~2577~~2863	~~2~~4
	2028 WD	~~152~~153	36.5	~~2158~~621598	~~1134~~515843	~~40~~48
	WD - WoD	~~33~~32	-3.~~7~~6	~~558~~571	~~876~~912981	~~38~~44
PM	2024 Base	~~41~~42	~~52~~51	~~1854~~118534	~~2336~~2354	1
	2028 WoD	~~80~~81	45.8	212532~~1231~~	60070	15
	2028 WD	~~98~~100	42.~~6~~4	~~2217~~622163	~~133807~~133859	44
	WD - WoD	~~18~~20	-3.~~2~~4	~~945~~910	~~7373~~673789	30

3.12 When comparing the results of the with development scenario against the without development scenario, the average delay increases in both peak hours, albeit more significantly in the ~~evening~~morning peak hour with a delay increase of ~~33~~32 seconds. The average speed decreases in both peak hours as a result of additional congestion.

3.13 **Table 8** sets out the network performance comparison for all scenarios at the 2038 forecast year.

Table 8: Stage 1A 2038 Network Performance Comparison

Peak Hour	Scenario	Delay (~~secs~~s)	Speed (mph)	Veh Arr (veh)	Latent Delay (s)	Latent Demand (Veh)
AM	2024 Base	52	48.6	18740	1401	1
	2038 WoD	211	32.3	~~2193~~221974	~~98417~~108213	~~133~~150
	2038 WD	~~260~~259	28.~~7~~8	~~2234~~222360	~~391723~~378853	~~404~~373
	WD - WoD	~~50~~48	-3.5	~~410~~386	~~293306~~270640	~~271~~223
PM	2024 Base	~~41~~42	~~52~~51	~~1854~~118534	~~2336~~2354	1
	2038 WoD	~~125~~126	40.~~3~~2	~~2228~~422275	~~732609~~748599	~~474~~484
	2038 WD	~~155~~154	36.~~7~~8	~~2285~~722872	~~1559332~~1567205	~~894~~906
	WD - WoD	~~30~~28	-3.~~6~~4	~~573~~597	~~826724~~818606	~~420~~422

3.14 Similarly to the 2028 assessment year results, **Table 8** shows that the average delay increases, the number of vehicles that enter the model increases, and Latent Demand increases in 2038. **Appendix 5** sets out where the Latent Demand is on the highway network.

3.15 In summary, the results show that, as expected, the EMG2 development is having an impact on the network performance across the VISSIM network area. Therefore, a comprehensive mitigation strategy using the Stage 2A modelling results has been proposed to address the impacts of the EMG2 development, details of which are presented in subsequent sections. The purpose of the mitigation is to demonstrate how the impacts of the EMG2 development would be mitigated and that there would be overall benefits to the operation of the Strategic Road Network around M1 Junction 24.

3.16 As a result, a mitigation strategy is proposed which set out in **Section 4**.

Stage 1B VISSIM Results

Journey Time Comparison

3.17 **Table 9** and **10** show the journey time comparison between the "without development" and "with development" scenarios for the forecast years 2028 and 2038 respectively for the Stage 1B scenarios. This excludes traffic from the Ratcliffe on Soar Powe Station Uniper site redevelopment, EMIP and draft Local Plan allocations from the baseline. This in turn helps provide a better understanding of the 'true' impacts of the EMG2 development proposals.

Table 9: Stage 1B 2028 Journey Time Comparison (Seconds)

	AM				PM			
Route	2024 Base	2028 WoD	2028 WD	WD - WoD	2024 Base	2028 WoD	2028 WD	WD - WoD
Route 1	353	359360	394397	3637	331	338	353	15
Route 2	339	354355	362365	810	317	323	337	14
Route 3	308	384362	579553	195191	301317	476448	502472	2524
Route 4	306	309	327336	1827	295293	289	319318	29
Route 5	323	335336	343345	89	309310	314	324	910
Route 6	272	298297	377383	7986	253292	258	265264	6
Route 7	400	488473	652617	164144	365381	539509	547516	87
Route 8	278	302301	387392	8491	254270	261	280279	18
Route 9	316	321320	344353	2233	300297	294	344343	5049
Route 10	355	498517	464408	-34109	317315	329330	386383	5753
Route 11	349	375381	395393	2012	339341	364366	394396	3130
Route 12	354	387409	621615	234206	346348	393	430437	3844
Route 13	337	340341	388	4847	349	379	404	25
Route 14	423	504497	488497	-150	387402	400399	457	5658
Route 15	333	472491	438382	-34109	284282	283	338335	5552
Route 16	397	497485	469479	-286	361376	377375	475	98100
Route 17	354	420405	407417	-1312	338337	338337	402401	64
Route 18	357	374386	586582	212196	332347	357354	382385	2431
Route 19	375	395407	609603	214196	364380	408404	433436	2632
Route 20	377	401413	610606	209193	370408	411406	423425	1219

Table 10: Stage 1B 2038 Journey Time Comparison (Seconds)

	AM				PM			
Route	2024 Base	2038 WoD	2038 WD	WD - WoD	2024 Base	2038 WoD	2038 WD	WD - WoD
Route 1	353	369368	448435	7967	331	350349	369	1920
Route 2	339	357356	363	7	317	326	342340	1514
Route 3	308	560558	771801	210243	301317	706722	717728	116
Route 4	306	321309	343332	2223	295293	293295	332329	3934
Route 5	323	337336	343342	6	309310	318	330329	1211

	AM				PM			
Route	2024 Base	2038 WoD	2038 WD	WD - WoD	2024 Base	2038 WoD	2038 WD	WD - WoD
Route 6	272	288	~~308~~306	~~20~~18	~~253~~292	~~267~~265	~~275~~273	~~9~~8
Route 7	400	~~633~~634	~~820~~848	~~187~~214	~~365~~381	~~767~~785	~~763~~773	-~~4~~12
Route 8	278	~~292~~293	~~319~~317	~~27~~24	~~254~~270	~~269~~268	~~292~~289	~~23~~21
Route 9	316	~~334~~322	~~360~~349	27	~~300~~297	~~297~~300	~~356~~353	~~59~~53
Route 10	355	~~342~~338	~~359~~350	~~17~~12	~~317~~315	~~333~~334	~~389~~387	~~55~~53
Route 11	349	~~384~~386	~~392~~396	~~8~~10	~~339~~341	~~382~~381	411	~~29~~30
Route 12	354	~~662~~670	~~697~~702	~~35~~32	~~346~~348	~~407~~419	~~433~~431	~~26~~12
Route 13	337	~~507~~512	~~502~~503	-~~5~~9	349	~~395~~396	~~419~~414	~~24~~18
Route 14	423	~~553~~549	~~614~~612	~~61~~63	~~387~~402	~~415~~414	~~484~~481	~~69~~67
Route 15	333	~~423~~425	~~483~~476	~~60~~51	~~284~~282	~~285~~286	~~341~~340	~~56~~54
Route 16	397	~~425~~413	~~447~~445	~~22~~32	~~361~~376	~~391~~390	~~518~~510	~~126~~120
Route 17	354	~~477~~476	~~542~~541	65	~~338~~337	335	~~407~~403	~~72~~68
Route 18	357	~~1037~~1064	1099~~1091~~	~~54~~35	~~332~~347	~~433~~440	451	~~18~~11
Route 19	375	~~728~~738	~~706~~705	-~~22~~33	~~364~~380	~~485~~492	502	~~17~~10
Route 20	377	~~734~~745	705	-~~28~~40	~~370~~408	~~495~~501	497	~~2~~-4

3.18 **Tables 9** and **10** show that there are still significant increases in journey times between the 'without development' and 'with development' scenarios in 2038, particularly at Finger Farm roundabout, EMG1 Gyratory and M1 J24. This a similar outcome to the Stage 1A results.

3.19 This is shown in **Table 11** and **12** which sets the ~~average~~mean maximum and maximum queues for the 2028 without and with development scenarios.

Table 11: Stage 1B 2028 ~~Average~~Mean Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	24	89	71	-19	22	31	128	97
2	Finger Farm	A453 N	20	30	43	13	13	16	30	14
3	Finger Farm	M1/A42 S	35	104	161	57	19	26	28	2
11	M1 J24	M1/A50	194	332	908	576	90	117	117	0
12	M1 J24	Remembrance Way	86	431	962	532	94	769	831	62
13	M1 J24	Deby Road	41	64	71	7	31	44	44	0
15	M1 J24	A453 S	41	64	94	31	70	82	106	24
16	M1 J24	Hilton Hotel Lane	23	80	84	4	16	35	37	2
17	M1 J24	M1 NB South of Slip	2	0	943	943	0	0	0	0
20	M1 J24	M1 NB Off Slip	95	97	725	629	51	86	90	3
24	EMG1 Gyratory	Kegworth By-Pass	192	158	195	38	138	109	133	23
25	EMG1 Gyratory	A453 S	128	506	176	-330	102	97	119	22
26	EMG1 Gyratory	Wilders Way L-Turn	4	42	58	17	6	9	14	5
27	EMG1 Gyratory	Wilders Way Ahead	3	10	10	0	6	8	11	2
28	EMG1 Gyratory	A453 S Left turn	65	128	66	-62	38	44	42	-2
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	105	130	171	42	73	71	89	18
30	EMG1 Gyratory	A453 N	109	127	106	-22	33	41	46	5

Mean Max Queues (m)			2028 AM				2028 PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	25	71	69	-2	22	29	119	90
2	Finger Farm	A453 N	20	34	44	10	13	17	30	13
3	Finger Farm	M1/A42 S	40	91	152	61	19	24	25	1
11	M1 J24	M1/A50	169	290	427	137	91	115	115	0
12	M1 J24	Remembrance Way	90	327	906	579	95	674	732	58
13	M1 J24	Deby Road	41	66	71	5	33	45	45	0
15	M1 J24	A453 S	39	78	90	12	68	81	107	26
16	M1 J24	Hilton Hotel Lane	23	80	93	13	15	36	38	2
17	M1 J24	M1 NB South of Slip	0	8	915	907	0	0	1	1
20	M1 J24	M1 NB Off Slip	79	166	824	658	52	73	108	35
24	EMG1 Gyratory	Kegworth By-Pass	197	130	235	105	131	106	130	24
25	EMG1 Gyratory	A453 S	129	402	231	-171	101	95	119	24
26	EMG1 Gyratory	Wilders Way L-Turn	7	100	30	-70	7	10	12	2
27	EMG1 Gyratory	Wilders Way Ahead	3	10	9	-1	6	9	11	2
28	EMG1 Gyratory	A453 S Left turn	63	72	83	11	37	42	44	2
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	124	100	215	115	79	66	85	19
30	EMG1 Gyratory	A453 N	113	147	90	-57	36	42	47	5
31	M1 J24	M1 SB Offlip (M1)	0	31	466	435	0	0	0	0
32	M1 J24	M1 SB Offlip (A50)	0	17	753	736	0	0	0	0

Table 12: Stage 1B 2028 Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	30	143	97	-46	32	42	209	167
2	Finger Farm	A453 N	29	37	54	17	27	19	41	22
3	Finger Farm	M1/A42 S	44	152	245	93	25	35	42	7
11	M1 J24	M1/A50	448	599	1128	529	114	140	132	-8
12	M1 J24	Remembrance Way	124	545	1443	897	127	1156	1279	123
13	M1 J24	Deby Road	53	69	85	16	37	55	50	-5
15	M1 J24	A453 S	61	70	160	90	115	109	142	32
16	M1 J24	Hilton Hotel Lane	33	99	98	-1	23	41	46	5
17	M1 J24	M1 NB South of Slip	8	2	1576	1573	0	2	5	2
20	M1 J24	M1 NB Off Slip	169	142	1029	887	64	124	110	-14
24	EMG1 Gyratory	Kegworth By-Pass	431	208	275	67	207	173	215	42
25	EMG1 Gyratory	A453 S	153	748	205	-543	138	115	162	47
26	EMG1 Gyratory	Wilders Way L-Turn	12	111	104	-7	17	15	21	6
27	EMG1 Gyratory	Wilders Way Ahead	7	13	14	1	9	10	13	3
28	EMG1 Gyratory	A453 S Left turn	104	185	95	-91	55	51	51	0
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	246	182	261	79	136	101	134	33
30	EMG1 Gyratory	A453 N	176	153	124	-29	43	52	52	0

Maximum Queues (m)			2028 AM				2028 PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	39	146	115	-31	30	40	175	135
2	Finger Farm	A453 N	48	56	53	-3	20	20	38	18
3	Finger Farm	M1/A42 S	49	146	207	61	27	29	33	4
11	M1 J24	M1/A50	279	430	432	2	114	124	136	12
12	M1 J24	Remembrance Way	126	444	1283	839	145	1002	1125	123
13	M1 J24	Deby Road	55	81	80	-1	39	53	50	-3
15	M1 J24	A453 S	53	170	103	-67	98	92	146	54
16	M1 J24	Hilton Hotel Lane	34	101	106	5	25	44	51	7
17	M1 J24	M1 NB South of Slip	0	54	1517	1463	0	2	6	4
20	M1 J24	M1 NB Off Slip	109	321	1134	813	62	100	231	131
24	EMG1 Gyratory	Kegworth By-Pass	423	224	281	57	182	160	251	91
25	EMG1 Gyratory	A453 S	197	684	335	-349	118	111	138	27
26	EMG1 Gyratory	Wilders Way L-Turn	16	209	72	-137	16	14	18	4
27	EMG1 Gyratory	Wilders Way Ahead	6	15	11	-4	10	11	13	2
28	EMG1 Gyratory	A453 S Left turn	105	110	121	11	47	49	53	4
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	255	168	277	109	146	86	126	40
30	EMG1 Gyratory	A453 N	202	214	123	-91	52	49	55	6
31	M1 J24	M1 SB Offlip (M1)	0	87	699	612	0	0	0	0
32	M1 J24	M1 SB Offlip (A50)	0	154	1154	1000	0	0	0	0

3.20 **Tables 13** and **14** summarise the ~~average~~mean maximum and maximum queues for the 2038 'without' and 'with development' scenarios.

Table 13: Stage 1B 2038 ~~Average~~Mean Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	24	51	45	-6	22	31	233	202
2	Finger Farm	A453 N	20	38	49	11	13	19	31	12
3	Finger Farm	M1/A42 S	35	54	82	29	19	24	91	67
11	M1 J24	M1/A50	194	269	1073	804	90	139	241	102
12	M1 J24	Remembrance Way	86	993	1509	516	94	1448	1503	55
13	M1 J24	Deby Road	41	66	65	-1	31	49	110	61
15	M1 J24	A453 S	41	69	100	32	70	84	126	42
16	M1 J24	Hilton Hotel Lane	23	33	35	2	16	184	285	101
17	M1 J24	M1 NB South of Slip	2	1916	1920	4	0	7	96	89
20	M1 J24	M1 NB Off Slip	95	608	1964	1357	51	322	287	-35
24	EMG1 Gyratory	Kegworth By-Pass	192	259	348	89	138	129	286	157
25	EMG1 Gyratory	A453 S	128	190	132	-58	102	91	201	110
26	EMG1 Gyratory	Wilders Way L-Turn	4	8	7	-1	6	10	37	28
27	EMG1 Gyratory	Wilders Way Ahead	3	7	6	-1	6	9	11	2
28	EMG1 Gyratory	A453 S Left turn	65	59	59	0	38	40	47	7
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	105	205	328	123	73	97	233	136
30	EMG1 Gyratory	A453 N	109	64	70	6	33	37	49	12

Mean Max Queues (m)			2038 AM				2038 PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	25	43	43	0	22	30	334	304
2	Finger Farm	A453 N	20	38	54	16	13	19	32	13
3	Finger Farm	M1/A42 S	40	54	76	22	19	23	34	11
11	M1 J24	M1/A50	169	255	372	117	91	133	141	8
12	M1 J24	Remembrance Way	90	983	1686	703	95	1556	1581	25
13	M1 J24	Deby Road	41	64	70	6	33	48	50	2
15	M1 J24	A453 S	39	68	90	22	68	82	118	36
16	M1 J24	Hilton Hotel Lane	23	32	35	3	15	184	211	27
17	M1 J24	M1 NB South of Slip	0	2745	2813	68	0	18	6	-12
20	M1 J24	M1 NB Off Slip	79	608	2928	2320	52	355	272	-83
24	EMG1 Gyratory	Kegworth By-Pass	197	190	271	81	131	147	181	34
25	EMG1 Gyratory	A453 S	129	154	124	-30	101	90	138	48
26	EMG1 Gyratory	Wilders Way L-Turn	7	7	5	-2	7	12	15	3
27	EMG1 Gyratory	Wilders Way Ahead	3	7	6	-1	6	9	11	2
28	EMG1 Gyratory	A453 S Left turn	63	55	59	4	37	41	45	4
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	124	159	242	83	79	108	133	25
30	EMG1 Gyratory	A453 N	113	67	70	3	36	40	48	8
31	M1 J24	M1 SB Offlip (M1)	0	19	78	59	0	0	0	0
32	M1 J24	M1 SB Offlip (A50)	0	17	597	580	0	0	0	0

Table 14: Stage 1B 2038 Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	24	51	45	-6	22	31	233	202
2	Finger Farm	A453 N	20	38	49	11	13	19	31	12
3	Finger Farm	M1/A42 S	35	54	82	29	19	24	91	67
11	M1 J24	M1/A50	194	269	1073	804	90	139	241	102
12	M1 J24	Remembrance Way	86	993	1509	516	94	1448	1503	55
13	M1 J24	Deby Road	41	66	65	-1	31	49	110	61
15	M1 J24	A453 S	41	69	100	32	70	84	126	42
16	M1 J24	Hilton Hotel Lane	23	33	35	2	16	184	285	101
17	M1 J24	M1 NB South of Slip	2	1916	1920	4	0	7	96	89
20	M1 J24	M1 NB Off Slip	95	608	1964	1357	51	322	287	-35
24	EMG1 Gyratory	Kegworth By-Pass	192	259	348	89	138	129	286	157
25	EMG1 Gyratory	A453 S	128	190	132	-58	102	91	201	110
26	EMG1 Gyratory	Wilders Way L-Turn	4	8	7	-1	6	10	37	28
27	EMG1 Gyratory	Wilders Way Ahead	3	7	6	-1	6	9	11	2
28	EMG1 Gyratory	A453 S Left turn	65	59	59	0	38	40	47	7
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	105	205	328	123	73	97	233	136
30	EMG1 Gyratory	A453 N	109	64	70	6	33	37	49	12

Maximum Queues (m)			2038 AM				2038 PM			
	Junction	Approach	Base	WoD	WD	WD-WoD	Base	WoD	WD	WD-WoD
1	Finger Farm	A453 W	39	75	73	-2	30	37	388	351
2	Finger Farm	A453 N	48	48	66	18	20	26	40	14
3	Finger Farm	M1/A42 S	49	88	143	55	27	29	44	15
11	M1 J24	M1/A50	279	349	432	83	114	153	186	33
12	M1 J24	Remembrance Way	126	1283	2560	1277	145	2465	2467	2
13	M1 J24	Deby Road	55	73	86	13	39	55	58	3
15	M1 J24	A453 S	53	76	130	54	98	94	159	65
16	M1 J24	Hilton Hotel Lane	34	39	43	4	25	218	248	30
17	M1 J24	M1 NB South of Slip	0	3010	3010	0	0	65	15	-50
20	M1 J24	M1 NB Off Slip	109	609	3010	2401	62	455	410	-45
24	EMG1 Gyratory	Kegworth By-Pass	423	246	367	121	182	216	281	65
25	EMG1 Gyratory	A453 S	197	208	162	-46	118	103	207	104
26	EMG1 Gyratory	Wilders Way L-Turn	16	15	9	-6	16	18	25	7
27	EMG1 Gyratory	Wilders Way Ahead	6	10	8	-2	10	11	13	2
28	EMG1 Gyratory	A453 S Left turn	105	67	72	5	47	53	54	1
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	255	235	341	106	146	134	182	48
30	EMG1 Gyratory	A453 N	202	90	84	-6	52	46	58	12
31	M1 J24	M1 SB Offlip (M1)	0	35	130	95	0	0	3	3
32	M1 J24	M1 SB Offlip (A50)	0	83	1035	952	0	0	0	0

Network Performance

3.21 **Table 15** sets out the network performance comparison for all scenarios at the 2028 forecast year.

Table 15: Stage 1B 2028 Network Performance Comparison

Peak Hour	Scenario	Delay (secss)	Speed (mph)	Veh Arr (veh)	Latent Delay (s)	Latent Demand (Veh)
AM	2024 Base	52	48.6	18740	1401	1
	2028 WoD	81	44.76	2024821253	2217 2133	1
	2028 WD	134133	38.35	2169521761	449714652	14
	WD - WoD	5452	-6.31	4421513	22801 2519	03
PM	2024 Base	41	52	18541	2336	1
	2028 WoD	7572	46.59	2124421255	5656356562	11
	2028 WD	10098	42.47	2213422145	156964155640	66
	WD - WoD	26	-4.12	890	10040199077	55

3.22 When comparing the results of the with development scenario against the without development scenario, the average delay increases in both peak hours with average speeds reducing, with the junction performance showing similarities in both peak hours.

3.23 **Table 16** summarises the network performance comparison for all scenarios at the 2038 forecast year.

Table 16: Stage 1B 2038 Network Performance Comparison

Peak Hour	Scenario	Delay (secss)	Speed (mph)	Veh Arr (veh)	Latent Delay (s)	Latent Demand (Veh)
AM	2024 Base	52	48.6	18740	1401	1
	2038 WoD	164	36.0	2150621514	397194445083	475502
	2038 WD	202203	32.65	2201421984	834631849994	707726
	WD - WoD	38	-3.4	508470	437437404911	232225
PM	2024 Base	41	52	18541	2336	1
	2038 WoD	108110	42.30	2232822299	516536516565	252

	2038 WD	~~163~~132	~~36.9~~38.8	~~2245~~23177	~~914689~~790090	~~648~~382
	WD - WoD	~~55~~23	~~-5.~~43.2	~~131~~878	~~398153~~273525	~~396~~130

3.24 Similarly to the 2028 assessment, the 2038 results show that as a result of the introduction of the EMG2 development the average delay increases, the number of vehicles that enter the model increases and Latent Demand increases. Average speeds therefore reduce as a result in both peak hours. **Appendix 5** sets out where the Latent Demand is on the highway network.

3.25 In summary, the results show that, as expected, the EMG2 development is also having an impact on the network performance across the VISSIM network area under the Stage 1B sensitivity test scenario. Therefore, similar to the conclusions of the Stage 1A scenario, a comprehensive mitigation strategy has been determined using the Stage 2A modelling outputs, as the core scenario which will also be tested using the Stage 2B modelling results to ensure it mitigates the impacts of the EMG2 development in both scenarios. This is detailed in subsequent sections.

3.26 As requested by LCC journey time and queue comparison graphs are provided within **Appendix ~~5~~3** and **~~6~~4** respectively for all scenarios.

4. PROPOSED MITIGATION

4.1 As a result of the Stage 1 VISSIM modelling, it has shown that mitigation is required to increase capacity on the highway network, particularly at M1 Junction 24, as well as at Finger Farm Roundabout and EMG1 gyratory.

4.2 It should be noted that implementing mitigation measures, particularly at roundabouts, can have knock-on effects on other approach arms due to increased circulatory flow. As such, an iterative process was undertaken in VISSIM to identify a highway solution that delivers overall improvements to the network. The proposed highway works are shown on Highways Plans and the Components of the Proposed Development Plan which are included within Appendix 21 of the Transport Assessment (BWB Reference EMG2-BWB-GEN-XX-RP-TR-0002 Revision P4).

4.3 The proposed highways works are described further as follows:

- A453/EMG2 Main Site access junction – providing access to the EMG2 Main Site via a new arm from the A453/Hunter Road roundabout (DCO Works No. 6).
- M1 Junction 24 improvements comprising:
  - Construction of a new free-flow link road from the M1 northbound to provide a direct link to the A50 westbound, which will cross over the A453, and will include the A50 westbound merge alterations (DCO Works Nos. 9 and 10);
  - Widening of the A50 eastbound link at J24 and other related works and traffic management measures in this location (DCO Works No. 11);
  - Alteration of the west side of the J24 roundabout to provide three lanes from the M1 northbound to A453 northbound through the junction, two lanes from the A453 northbound to the M1 northbound through the junction and removal of the segregated left-turn lane from the A453 northbound to the A50 westbound post feedback from NH (DCO Works No. 12a);
  - Signing and lining amendments on the east side of the J24 roundabout and the A453 southbound approach (DCO Works No. 12b);
  - Provision of new M1 northbound exit to the A50 and associated improvements to gantries signage, signals and road markings on the M1 (DCO Works No. 8); and
  - Changes to the signage on the M1 northbound before J23A to sign the A50 via the new M1 J24 link road rather than via J23A as at present (DCO Works No. 16).
- A6 Kegworth Bypass/A453 Junction Improvements providing widening at the EMG1 roundabout to increase junction capacity to accommodate traffic generation from the EMG2 Main Site (DCO Works No. 13).
- Works to the A453/A42/Finger Farm roundabout (DCO Works No 18).

4.4 Once the Stage 1A modelling testing of the proposed highway mitigation was complete, the scheme drawings were sent to AECOM to undertake Stage 2 PRTM modelling to see how the proposed highway mitigation would affect traffic routing in and around the network with the increase in capacity at M1 J24. The following section presents the results of the Stage 2 modelling.

5. STAGE 2 VISSIM MODELLING

Introduction

5.1 AECOM provided the Stage 2A/B PRTM modelling outputs which showed that the mitigation is drawing traffic back onto the Strategic Road Network due to the increased capacity at J24, as planned.

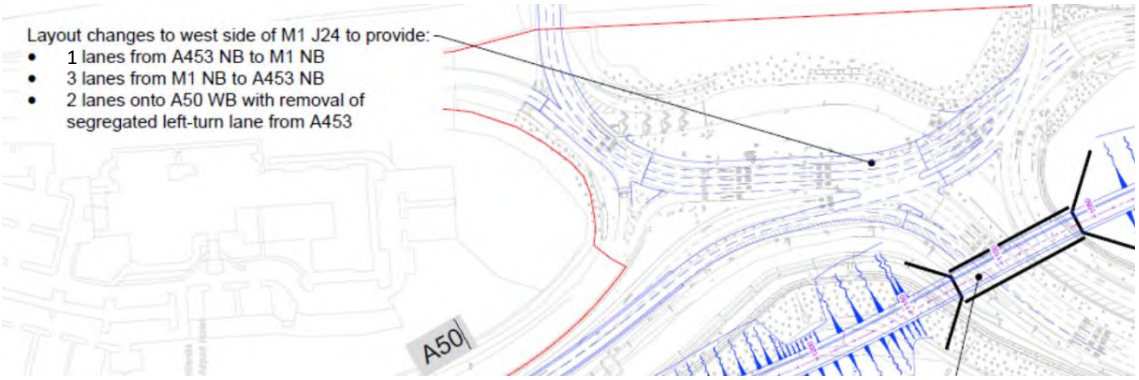
5.2 This section sets out the results of the Stage 2A and 2B PRTM modelling outputs with the mitigation in place within VISSIM, to determine if the mitigation scheme can still accommodate the re-routing of traffic.

Initial Runs

5.3 The initial runs in VISSIM showed that with traffic re-routing there is a need for further mitigation at M1 J24, in the southwest corner, in terms of widening and changes to the lane allocation as a result. The segregated left turn lane from the A453 northbound to A50 westbound was also removed, albeit post feedback from NH as to the design proposals rather than anything capacity related. These changes are included for in the VISSIM modelling work.

5.4 **Figure 5** therefore shows an extract of the changes made at the southwest corner of M1 J24.

Figure 5. M1 Junction 24 Highway Mitigation changes



5.5 The following section summarises the proposed highway mitigation and presents the results of the strategic highway modelling under Stages 2A and 2B as well as revised VISSIM modelling to show the benefits of the proposed highway mitigation.

Stage 2A VISSIM Results

Journey Time Comparison

5.6 ~~**Table 117**~~**Table 17** and **18** show the journey time comparison between the without development and with development + mitigation scenarios for the forecast years 2028 and 2038 respectively.

Table 17: Stage 2A 2028 Journey Time Comparison (Seconds)

	AM				PM			
Route	2024 Base	2028 WoD	2028 WD + Mit	(WD + Mit) - WoD	2024 Base	2028 WoD	2028 WD + Mit	(WD + Mit) - WoD
Route 1	353	358	427434	6976	331	341342	352	1110
Route 2	339	356	365	9	317	324	324	0
Route 3	308	311312	312311	-1	301317	413438	324322	-89116
Route 4	306	307304	299295	-89	295293	290288	285286	-52
Route 5	323	338	350349	1211	309310	315	315	10
Route 6	272	294293	466	172173	253292	259	295301	3642
Route 7	400	399396	350349	-4947	365381	473498	348346	-125152
Route 8	278	302	475	173	254270	262	295302	3340
Route 9	316	319315	309306	-109	300297	295294	292294	-20
Route 10	355	337332	322321	-1511	317315	333336	343	107
Route 11	349	379	357356	-2223	339341	374372	368369	-63
Route 12	354	650665	298	-352367	346348	454439	333	-121106
Route 13	337	431436	361	-6975	349	397396	418	2022
Route 14	423	489	431432	-5857	387402	396395	388389	-86
Route 15	333	312309	293292	-1917	284282	284287	286	2-1
Route 16	397	471468	411	-6057	361376	371370	376377	57
Route 17	354	378377	373	-54	338337	334333	343	910
Route 18	357	665694	392393	-272301	332347	465449	364365	-10184
Route 19	375	659670	414415	-245255	364380	517500	437438	-8062
Route 20	377	659670	436440	-222230	370408	519502	459458	-6144

Table 18: Stage 2A 2038 Journey Time Comparison (Seconds)

	AM				PM			
Route	2024 Base	2038 WoD	2038 WD + Mit	(WD + Mit) - WoD	2024 Base	2038 WoD	2038 WD + Mit	(WD + Mit) - WoD
Route 1	353	485493	648641	285148	331	345	386387	42
Route 2	339	364363	390412	-9549	317	327326	327	01
Route 3	308	565575	537544	-2831	301317	896914	755756	-141158
Route 4	306	331336	304306	-2630	295293	303306	303302	0-4
Route 5	323	342	375397	3255	309310	319	319	10
Route 6	272	323328	538575	215247	253292	266	293	27
Route 7	400	650663	581588	-6975	365381	959977	785786	-174191
Route 8	278	331336	550584	219248	254270	269	295	2526
Route 9	316	344348	315316	-2932	300297	308310	309	-1
Route 10	355	490489	322	-168167	317315	333334	339340	6
Route 11	349	406403	381397	-256	339341	380377	376375	-42
Route 12	354	712701	326340	-386358	346348	388	319	-7050
Route 13	337	457	392390	-6467	349	390	407	1617
Route 14	423	806781	516584	-290197	387402	413412	413414	02

	AM				PM			
Route	2024 Base	2038 WoD	2038 WD + Mit	(WD + Mit) - WoD	2024 Base	2038 WoD	2038 WD + Mit	(WD + Mit) - WoD
Route 15	333	~~469~~470	294	~~-175~~176	~~284~~282	~~286~~287	~~288~~289	2
Route 16	397	~~1028~~1003	~~489~~559	~~-539~~444	~~361~~376	~~395~~393	~~430~~432	~~35~~39
Route 17	354	~~579~~556	~~379~~395	~~-200~~161	~~338~~337	~~340~~339	~~354~~355	~~1~~4~~1~~6
Route 18	357	830	~~538~~567	~~-291~~263	~~332~~347	~~404~~400	~~376~~375	~~-28~~25
Route 19	375	~~809~~797	~~521~~564	~~-288~~233	~~364~~380	~~454~~451	~~439~~438	~~-1~~5~~1~~3
Route 20	377	~~810~~802	~~550~~605	~~-260~~197	~~370~~408	~~461~~460	~~476~~473	~~1~~4~~1~~3

5.7 **Tables 17** and **18** show that there are ~~significant~~ reductions in journey times between scenario 2038 'without development' and 2038 'with development + mitigation', particularly at Finger Farm roundabout, EMG1 Gyratory, and M1 J24, in the morning peak hour, which is the busier of the two peak hours.

5.8 A review of the VISSIM simulation indicates that in the morning peak period the M1 northbound off slip becomes ~~significantly~~ less congested with slight queuing back onto the mainline but still allowing vehicles to access the proposed link road.

5.9 There are also reductions in journey times in the evening peak hour which overall show that the mitigation provides significant benefit to the Strategic Road Network.

5.10 This is shown in **Tables 19** and **20** which summarises the ~~average~~mean maximum and maximum queues for the 2028 without and with development scenarios.

Table 19: Stage 2A 2028 ~~Average~~Mean Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD Mit	Miti - WoD	Base	WoD	WD Mit	Miti - WoD
1	Finger Farm	A453 W	24	50	28	-22	22	21	16	-5
2	Finger Farm	A453 N	20	28	48	20	13	15	32	17
3	Finger Farm	M1/A42 S	35	63	46	-18	19	17	15	-3
11	M1 J24	M1/A50	194	292	360	68	90	120	283	163
12	M1 J24	Remembrance Way	86	61	904	843	94	515	1315	800
13	M1 J24	Deby Road	41	68	64	-5	31	47	60	13
15	M1 J24	A453 S	41	81	76	-6	70	95	89	-7
16	M1 J24	Hilton Hotel Lane	23	690	25	-665	16	46	134	88
17	M1 J24	M1 NB South of Slip	2	1235	2	-1233	0	372	0	-371
20	M1 J24	M1 NB Off Slip	95	916	71	-845	51	496	68	-428
24	EMG1 Gyratory	Kegworth By-Pass	192	170	287	118	138	123	171	48
25	EMG1 Gyratory	A453 S	128	257	94	-163	102	75	59	-15
26	EMG1 Gyratory	Wilders Way L-Turn	4	6	6	0	6	8	16	9
27	EMG1 Gyratory	Wilders Way Ahead	3	7	6	-1	6	8	9	1
28	EMG1 Gyratory	A453 S Left turn	65	82	71	-11	38	44	44	0
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	105	129	273	144	73	70	122	53
30	EMG1 Gyratory	A453 N	109	65	63	-2	33	38	43	5

Mean Max Queues (m)			2028 AM				2028 PM			
	Junction	Approach	Base	WoD	WD Mit	Miti - WoD	Base	WoD	WD Mit	Miti - WoD
1	Finger Farm	A453 W	25	49	36	-13	22	22	21	-1
2	Finger Farm	A453 N	20	28	38	10	13	17	28	11
3	Finger Farm	M1/A42 S	40	67	52	-15	19	18	17	-1
11	M1 J24	M1/A50	169	262	432	170	91	121	297	176
12	M1 J24	Remembrance Way	90	61	53	-8	95	578	197	-381
13	M1 J24	Deby Road	41	69	70	1	33	46	55	9
15	M1 J24	A453 S	39	85	72	-13	68	88	102	14
16	M1 J24	Hilton Hotel Lane	23	603	385	-218	15	46	26	-20
17	M1 J24	M1 NB South of Slip	0	1446	0	-1446	0	216	0	-216
20	M1 J24	M1 NB Off Slip	79	1159	67	-1092	52	448	61	-387
24	EMG1 Gyratory	Kegworth By-Pass	197	153	184	31	131	121	121	0
25	EMG1 Gyratory	A453 S	129	238	98	-140	101	72	61	-11
26	EMG1 Gyratory	Wilders Way L-Turn	7	4	4	0	7	9	12	3
27	EMG1 Gyratory	Wilders Way Ahead	3	5	4	-1	6	8	9	1
28	EMG1 Gyratory	A453 S Left turn	63	87	71	-16	37	42	46	4
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	124	122	174	52	79	85	98	13
30	EMG1 Gyratory	A453 N	113	63	60	-3	36	38	38	0
31	M1 J24	M1 SB Offlip (M1)	0	14	761	747	0	0	0	0
32	M1 J24	M1 SB Offlip (A50)	0	38	1178	1140	0	0	1	1

Table 20: Stage 2A 2028 Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD Mit	Miti - WoD	Base	WoD	WD Mit	Miti - WoD
1	Finger Farm	A453 W	30	65	44	-21	32	25	23	-2
2	Finger Farm	A453 N	29	32	64	32	27	20	39	19
3	Finger Farm	M1/A42 S	44	84	63	-21	25	22	18	-4
11	M1 J24	M1/A50	448	505	424	-80	114	144	321	177
12	M1 J24	Remembrance Way	124	69	1302	1233	127	744	1987	1243
13	M1 J24	Deby Road	53	73	78	5	37	52	72	20
15	M1 J24	A453 S	61	91	89	-2	115	129	102	-27
16	M1 J24	Hilton Hotel Lane	33	937	30	-907	23	52	148	96
17	M1 J24	M1 NB South of Slip	8	1924	11	-1913	0	804	2	-802
20	M1 J24	M1 NB Off Slip	169	1185	82	-1103	64	608	75	-533
24	EMG1 Gyratory	Kegworth By-Pass	431	227	430	203	207	187	255	68
25	EMG1 Gyratory	A453 S	153	390	140	-250	138	95	69	-26
26	EMG1 Gyratory	Wilders Way L-Turn	12	10	12	2	17	11	29	18
27	EMG1 Gyratory	Wilders Way Ahead	7	10	10	0	9	10	12	1
28	EMG1 Gyratory	A453 S Left turn	104	124	88	-35	55	53	54	1
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	246	178	390	212	136	105	185	79
30	EMG1 Gyratory	A453 N	176	79	75	-4	43	47	61	14

Maximum Queues (m)			2028 AM				2028 PM			
	Junction	Approach	Base	WoD	WD Mit	Miti - WoD	Base	WoD	WD Mit	Miti - WoD
1	Finger Farm	A453 W	39	75	62	-13	30	35	31	-4
2	Finger Farm	A453 N	48	40	45	5	20	23	34	11
3	Finger Farm	M1/A42 S	49	84	74	-10	27	26	20	-6
11	M1 J24	M1/A50	279	400	435	35	114	145	352	207
12	M1 J24	Remembrance Way	126	69	58	-11	145	812	230	-582
13	M1 J24	Deby Road	55	84	82	-2	39	55	66	11
15	M1 J24	A453 S	53	109	84	-25	98	126	128	2
16	M1 J24	Hilton Hotel Lane	34	800	464	-336	25	52	32	-20
17	M1 J24	M1 NB South of Slip	0	2409	1	-2408	0	482	0	-482
20	M1 J24	M1 NB Off Slip	109	1691	72	-1619	62	582	65	-517
24	EMG1 Gyratory	Kegworth By-Pass	423	212	289	77	182	242	161	-81
25	EMG1 Gyratory	A453 S	197	386	110	-276	118	90	70	-20
26	EMG1 Gyratory	Wilders Way L-Turn	16	10	9	-1	16	17	18	1
27	EMG1 Gyratory	Wilders Way Ahead	6	8	8	0	10	11	12	1
28	EMG1 Gyratory	A453 S Left turn	105	137	99	-38	47	50	51	1
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	255	171	289	118	146	162	125	-37
30	EMG1 Gyratory	A453 N	202	72	74	2	52	53	46	-7
31	M1 J24	M1 SB Offlip (M1)	0	38	1160	1122	0	0	0	0
32	M1 J24	M1 SB Offlip (A50)	0	189	1722	1533	0	0	4	4

5.11 **Table 21** and **22** which sets the ~~average~~mean maximum and maximum queues for the 2038 'without' and 'with development' scenarios.

Table 21: Stage 2A 2038 ~~Average~~Mean Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD Mit	Miti - WoD	Base	WoD	WD Mit	Miti - WoD
1	Finger Farm	A453 W	24	579	36	-543	22	57	102	45
2	Finger Farm	A453 N	20	27	51	23	13	21	28	7
3	Finger Farm	M1/A42 S	35	238	48	-190	19	24	21	-3
11	M1 J24	M1/A50	194	1631	1877	246	90	146	280	133
12	M1 J24	Remembrance Way	86	951	822	-129	94	1791	1598	-193
13	M1 J24	Deby Road	41	72	106	34	31	52	68	17
15	M1 J24	A453 S	41	554	205	-349	70	105	109	4
16	M1 J24	Hilton Hotel Lane	23	1362	681	-681	16	223	39	-184
17	M1 J24	M1 NB South of Slip	2	1611	48	-1563	0	0	0	0
20	M1 J24	M1 NB Off Slip	95	609	210	-399	51	182	58	-124
24	EMG1 Gyratory	Kegworth By-Pass	192	321	337	17	138	205	235	30
25	EMG1 Gyratory	A453 S	128	1025	93	-932	102	105	95	-10
26	EMG1 Gyratory	Wilders Way L-Turn	4	18	7	-11	6	11	15	4
27	EMG1 Gyratory	Wilders Way Ahead	3	10	6	-4	6	10	11	1
28	EMG1 Gyratory	A453 S Left turn	65	184	61	-124	38	41	43	2
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	105	280	310	29	73	143	205	62
30	EMG1 Gyratory	A453 N	109	74	62	-11	33	38	44	6

Mean Max Queues (m)			2038 AM				2038 PM			
	Junction	Approach	Base	WoD	WD Mit	Miti - WoD	Base	WoD	WD Mit	Miti - WoD
1	Finger Farm	A453 W	25	562	40	-522	22	52	66	14
2	Finger Farm	A453 N	20	26	44	18	13	23	29	6
3	Finger Farm	M1/A42 S	40	216	47	-169	19	25	22	-3
11	M1 J24	M1/A50	169	428	434	6	91	146	281	135
12	M1 J24	Remembrance Way	90	971	784	-187	95	2209	1788	-421
13	M1 J24	Deby Road	41	71	84	13	33	51	68	17
15	M1 J24	A453 S	39	479	192	-287	68	96	111	15
16	M1 J24	Hilton Hotel Lane	23	1370	686	-684	15	226	40	-186
17	M1 J24	M1 NB South of Slip	0	1831	40	-1791	0	2	0	-2
20	M1 J24	M1 NB Off Slip	79	654	184	-470	52	163	59	-104
24	EMG1 Gyratory	Kegworth By-Pass	197	357	289	-68	131	226	231	5
25	EMG1 Gyratory	A453 S	129	1038	92	-946	101	104	93	-11
26	EMG1 Gyratory	Wilders Way L-Turn	7	25	5	-20	7	14	15	1
27	EMG1 Gyratory	Wilders Way Ahead	3	10	6	-4	6	10	11	1
28	EMG1 Gyratory	A453 S Left turn	63	205	61	-144	37	42	43	1
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	124	316	267	-49	79	170	195	25
30	EMG1 Gyratory	A453 N	113	84	61	-23	36	41	43	2
31	M1 J24	M1 SB Offlip (M1)	0	145	1121	976	0	0	0	0
32	M1 J24	M1 SB Offlip (A50)	0	1321	2299	978	0	0	0	0

Table 22: Stage 2A 2038 Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD Mit	Miti - WoD	Base	WoD	WD Mit	Miti - WoD
1	Finger Farm	A453 W	30	1062	57	-1005	32	104	234	130
2	Finger Farm	A453 N	29	37	63	26	27	29	33	4
3	Finger Farm	M1/A42 S	44	314	58	-257	25	37	27	-9
11	M1 J24	M1/A50	448	1990	1915	-75	114	172	301	128
12	M1 J24	Remembrance Way	124	1346	1119	-227	127	2010	2010	0
13	M1 J24	Deby Road	53	91	164	73	37	62	83	21
15	M1 J24	A453 S	61	912	302	-611	115	131	137	6
16	M1 J24	Hilton Hotel Lane	33	1645	1075	-569	23	302	44	-258
17	M1 J24	M1 NB South of Slip	8	1984	150	-1834	0	2	0	-2
20	M1 J24	M1 NB Off Slip	169	610	315	-295	64	330	66	-264
24	EMG1 Gyratory	Kegworth By-Pass	431	389	575	186	207	333	364	32
25	EMG1 Gyratory	A453 S	153	1231	126	-1105	138	126	131	5
26	EMG1 Gyratory	Wilders Way L-Turn	12	32	13	-19	17	19	24	5
27	EMG1 Gyratory	Wilders Way Ahead	7	12	9	-2	9	13	13	0
28	EMG1 Gyratory	A453 S Left turn	104	206	73	-133	55	46	50	4
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	246	386	468	83	136	232	308	77
30	EMG1 Gyratory	A453 N	176	82	79	-3	43	45	50	6

Maximum Queues (m)			2038 AM				2038 PM			
	Junction	Approach	Base	WoD	WD Mit	Miti - WoD	Base	WoD	WD Mit	Miti - WoD
1	Finger Farm	A453 W	39	1011	55	-956	30	95	153	58
2	Finger Farm	A453 N	48	39	63	24	20	28	34	6
3	Finger Farm	M1/A42 S	49	301	60	-241	27	32	30	-2
11	M1 J24	M1/A50	279	432	435	3	114	160	293	133
12	M1 J24	Remembrance Way	126	1349	1065	-284	145	2778	2683	-95
13	M1 J24	Deby Road	55	83	104	21	39	55	83	28
15	M1 J24	A453 S	53	811	384	-427	98	108	128	20
16	M1 J24	Hilton Hotel Lane	34	1645	1113	-532	25	323	48	-275
17	M1 J24	M1 NB South of Slip	0	2577	116	-2461	0	9	0	-9
20	M1 J24	M1 NB Off Slip	109	828	255	-573	62	269	63	-206
24	EMG1 Gyratory	Kegworth By-Pass	423	474	462	-12	182	294	390	96
25	EMG1 Gyratory	A453 S	197	1237	110	-1127	118	120	121	1
26	EMG1 Gyratory	Wilders Way L-Turn	16	40	13	-27	16	28	21	-7
27	EMG1 Gyratory	Wilders Way Ahead	6	12	9	-3	10	13	14	1
28	EMG1 Gyratory	A453 S Left turn	105	428	77	-351	47	46	51	5
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	255	438	402	-36	146	245	324	79
30	EMG1 Gyratory	A453 N	202	101	80	-21	52	58	53	-5
31	M1 J24	M1 SB Offlip (M1)	0	198	1268	1070	0	0	0	0
32	M1 J24	M1 SB Offlip (A50)	0	1708	2308	600	0	0	0	0

5.12 The tables above shows that the proposed mitigation provides a ~~significant~~ reduction in both the ~~average~~mean maximum and maximum queues for both 2028 and 2038. That is apart from the M1/A50 approach, which increases in the PM.

5.13 This is a result of the proposed mitigation allowing more circulating traffic into J24 which in turn allows more traffic to access the A453 Remembrance Way resulting in more green time to the circulatory. It is however worth noting that the model accounts for large committed developments and the associated traffic but **not** the mitigation strategies (Uniper in this case).

Network Performance

5.14 **Table 23** below sets out the network performance comparison for all scenarios during the 2028 forecast year.

Table 23: Stage 2A 2028 Network Performance Comparison

Peak Hour	Scenario	Delay (~~secs~~)	Speed (mph)	Veh Arr (veh)	Latent Delay (s)	Latent Demand (Veh)
AM	2024 Base	52	48.6	18740	1401	1
	WoD	~~120~~121	40.~~2~~1	~~2102~~821027	~~2577~~2863	~~2~~4
	WD	~~152~~153	36.5	~~2158~~621598	~~1134~~515843	~~40~~48
	WD Mit	93	43.~~0~~1	~~2197~~521970	~~2925~~2926	2
	WD Minus ~~WD~~WoD	~~33~~32	-3.~~7~~6	~~55~~8571	~~876~~912981	~~38~~44
	Mit Minus WoD	-~~27~~28	~~2.9~~3.0	~~94~~7943	~~34~~863	~~0~~-2
PM	2024 Base	~~52~~42	~~48.6~~51	~~1874~~018534	~~1401~~2354	1
	WoD	~~80~~81	45.8	21253~~21231~~	60070	15
	WD	~~98~~100	42.~~6~~4	~~2217~~622163	~~133807~~133859	44
	WD Mit	73	46.~~6~~5	~~2229~~222288	~~123540~~123541	49
	WD – ~~WD~~WoD	~~18~~20	-3.~~2~~4	~~94~~5910	~~7373~~673789	30
	Mit – WoD	-7	0.7	~~1061~~1035	~~6347~~063471	34

~~5.15~~ When comparing the results of the 'with development' scenario including for mitigation against the 'without development' scenario, the average delay reduces ~~significantly~~ in

the morning peak hour (~~27~~28 seconds), and the average speed and vehicles arriving increases significantly (+~~2.9mph~~3.0mph and ~~947~~943 vehicles respectively).

5.15 The latent demand would ~~remain at~~decrease by 2 vehicles.

5.16 In the evening peak hour, the average delay ~~increases~~decrease slightly by 7 seconds~~, but from a very low base (the evening peak operates far better overall than the morning peak hour, which has always been the key peak hour of the two assessed).~~. The average speed ~~decreases~~increases slightly by 0.7mph~~, albeit from a high base (45.8mph).~~. The number of vehicles arriving in the network increases by ~~1061~~1035 vehicles, and the latent demand increases by 34 vehicles, which is a positive overall, in that the Strategic Road Network is able to accommodate a higher number of vehicles.

5.17 The benefit of the mitigation is also shown in the journey time tables which show a number of routes reducing in time once the mitigation scheme is introduced which re-enforces the above.

5.18 **Table 24** sets out the network performance comparison for all scenarios at the 2038 forecast year.

Table 24: Stage 2A 2038 Network Performance Comparison

Peak Hour	Scenario	Delay~~(secs)~~ (s)	Speed (mph)	Veh Arr ~~(veh)~~	Latent Delay ~~(s)~~	Latent Demand ~~(Veh)~~
AM	2024 Base	52	48.6	18740	1401	1
	WoD	211	32.3	~~2193~~21974	~~98417~~108213	~~133~~150
	WD	~~260~~259	28.~~7~~8	~~2234~~22360	~~391723~~378853	~~404~~373
	WD Mit	~~178~~177	34.6	~~2278~~22739	~~100120~~71003413	~~582~~580
	WD – ~~WD~~WoD	~~50~~48	-3.5	~~410~~386	~~293306~~270640	~~271~~223
	Mit – WoD	-~~33~~34	2.4	~~852~~765	~~902790~~895201	~~449~~430
PM	2024 Base	~~52~~42	~~48.6~~51	~~1874~~18534	~~1401~~2354	1
	WoD	~~125~~126	40.~~3~~2	~~2228~~22275	~~732609~~748599	~~474~~484
	WD	~~155~~154	36.~~7~~8	~~2285~~22872	~~155933~~21567205	~~894~~906
	WD Mit	~~119~~120	40.6	~~2313~~23151	~~972518~~980709	~~492~~500
	WD – ~~WD~~WoD	~~30~~28	-3.~~6~~4	~~573~~597	~~826724~~818606	~~420~~422
	Mit – WoD	-~~6~~7	0.~~3~~4	~~850~~876	~~239909~~232110	~~18~~16

5.19 Similarly to the 2028 assessment, the 2038 results show that the average delay reduces, considerably still in the morning peak hour (~~33~~34 seconds), which results in higher average speeds and an additional ~~852~~765 vehicles arriving through the network area.

5.20 In the evening peak hour, there is a marginal decrease in delay of ~~6~~7 seconds with average speeds increasing slightly by 0.~~3mph~~4mph. Whilst this is a small change, they are again from a low base and the junction performance overall would be much better compared to the morning peak hour, which is the key time period.

5.21 Also journey times for the 2038 with mitigation scenarios show a number of routes decreasing in time taken which is a positive and illustrates that the mitigation scheme provided a significant benefit to the Strategic Road Network. **Appendix 5** sets out where the Latent Demand is on the highway network.

5.22 Therefore the results show that overall the proposed mitigation scheme provides sufficient benefit for the Strategic Road Network especially at M1 J24.

Stage 2B VISSIM Results

Journey Time Comparison

5.23 **Table** 1**25** and **26** show the journey time comparison between the 'without development' and 'with development + mitigation' scenarios for the modelling years of 2028 and 2038 respectively.

Table 25: Stage 2B 2028 Journey Time Comparison (Seconds)

	AM				PM			
Route	2024 Base	2028 WoD	2028 WD + Mit	WD + Mit – WoD	2024 Base	2028 WoD	2028 WD + Mit	WD + Mit – WoD
Route 1	353	~~359~~360	360	~~6~~0	331	338	348	10
Route 2	339	~~354~~355	348	-~~11~~7	317	323	324	1
Route 3	308	~~384~~362	~~391~~426	~~7~~64	~~301~~317	~~476~~448	~~366~~370	-~~111~~78
Route 4	306	309	~~296~~298	-~~1~~411	~~295~~293	289	~~286~~284	-~~4~~5
Route 5	323	~~335~~336	332	-~~3~~4	~~309~~310	314	~~315~~316	~~1~~2
Route 6	272	~~298~~297	~~351~~312	~~54~~15	~~253~~292	258	~~278~~277	19
Route 7	400	~~488~~473	~~423~~457	-~~65~~16	~~365~~381	~~539~~509	~~391~~394	-~~148~~115
Route 8	278	~~302~~301	~~356~~317	~~54~~16	~~254~~270	261	~~279~~278	17
Route 9	316	~~321~~320	~~307~~309	-~~1~~511	~~300~~297	294	~~294~~291	-~~1~~3
Route 10	355	~~498~~517	~~321~~323	-~~176~~194	~~317~~315	~~329~~330	~~344~~341	~~15~~11
Route 11	349	~~375~~381	~~359~~358	-~~16~~23	~~339~~341	~~364~~366	~~358~~359	-~~6~~7
Route 12	354	~~387~~409	292	-~~95~~117	~~346~~348	393	324	-69
Route 13	337	~~340~~341	355	~~15~~14	349	379	~~405~~406	27
Route 14	423	~~504~~497	~~428~~433	-~~75~~64	~~387~~402	~~400~~399	~~393~~392	-7
Route 15	333	~~472~~491	~~293~~295	-~~179~~196	~~284~~282	283	~~289~~286	~~6~~3
Route 16	397	~~497~~485	~~405~~410	-~~9~~275	~~361~~376	~~377~~375	~~380~~379	~~3~~4
Route 17	354	~~420~~405	~~375~~376	-~~45~~29	~~338~~337	~~338~~337	~~346~~345	8
Route 18	357	~~374~~386	~~381~~386	~~7~~0	~~332~~347	~~357~~354	~~356~~355	-1
Route 19	375	~~395~~407	~~403~~407	~~8~~0	~~364~~380	~~408~~404	~~425~~423	~~17~~19
Route 20	377	~~401~~413	~~433~~439	~~32~~26	~~370~~408	~~411~~406	~~446~~443	~~36~~37

Table 26: Stage 2B 2038 Journey Time Comparison (Seconds)

	AM				PM			
Route	2024 Base	2038 WoD	2038 WD + Mit	WD + Mit – WoD	2024 Base	2038 WoD	2038 WD + Mit	WD + Mit – WoD
Route 1	353	~~369~~368	~~421~~420	~~65~~52	331	~~350~~349	~~379~~378	29
Route 2	339	~~357~~356	348	-~~21~~8	317	326	328	2

	AM				PM			
Route	2024 Base	2038 WoD	2038 WD + Mit	WD + Mit – WoD	2024 Base	2038 WoD	2038 WD + Mit	WD + Mit – WoD
Route 3	308	560558	589575	2917	301317	706722	654640	-5282
Route 4	306	321309	300306	-213	295293	293295	290289	-36
Route 5	323	337336	331	-65	309310	318	320	2
Route 6	272	288	300309	1221	253292	267265	296298	2933
Route 7	400	633634	621610	-1224	365381	767785	684668	-83117
Route 8	278	292293	306315	1422	254270	269268	296298	2830
Route 9	316	334322	311318	-224	300297	297300	296295	-15
Route 10	355	342338	321326	-2012	317315	333334	350349	1715
Route 11	349	384386	361362	-2324	339341	382381	374373	-78
Route 12	354	662670	300	-363370	346348	407419	350	-5869
Route 13	337	507512	367	-140145	349	395396	434	3938
Route 14	423	553549	424430	-130119	387402	415414	420416	52
Route 15	333	423425	291295	-132130	284282	285286	291290	64
Route 16	397	425413	402407	-236	361376	391390	410406	1916
Route 17	354	477476	376381	-10295	338337	335	349	14
Route 18	357	10371064	386385	-651679	332347	433440	399	-3441
Route 19	375	728738	409408	-319330	364380	485492	482	-310
Route 20	377	734745	430	-304315	370408	495501	531528	3727

5.24 Similarly to the Stage 2A scenario, **Tables 25** and **26** show that in Stage 2B there are significant decreases in journey times between the 'without development' and 'with development' scenarios at the 2038 forecast year particularly at Finger Farm roundabout, EMG1 Gyratory and M1 J24.

5.25 This is shown in **Tables 27** and **28** which summarise the average and maximum queues for the 2028 without and with development traffic.

Table 27: Stage 2B 2028 ~~Average~~Mean Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD Mit	Miti - WoD	Base	WoD	WD Mit	Miti - WoD
1	Finger Farm	A453 W	24	89	27	-62	22	31	24	-7
2	Finger Farm	A453 N	20	30	44	14	13	16	28	12
3	Finger Farm	M1/A42 S	35	104	38	-65	19	26	16	-10
11	M1 J24	M1/A50	194	332	587	255	90	117	208	91
12	M1 J24	Remembrance Way	86	431	298	-132	94	769	384	-385
13	M1 J24	Deby Road	41	64	66	2	31	44	53	9
15	M1 J24	A453 S	41	64	68	5	70	82	88	7
16	M1 J24	Hilton Hotel Lane	23	80	64	-16	16	35	30	-5
17	M1 J24	M1 NB South of Slip	2	0	1	0	0	0	0	0
20	M1 J24	M1 NB Off Slip	95	97	64	-32	51	86	50	-36
24	EMG1 Gyratory	Kegworth By-Pass	192	158	172	15	138	109	109	-1
25	EMG1 Gyratory	A453 S	128	506	83	-422	102	97	65	-33
26	EMG1 Gyratory	Wilders Way L-Turn	4	42	4	-37	6	9	12	3
27	EMG1 Gyratory	Wilders Way Ahead	3	10	6	-4	6	8	9	1
28	EMG1 Gyratory	A453 S Left turn	65	128	71	-57	38	44	46	3
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	105	130	146	16	73	71	88	17
30	EMG1 Gyratory	A453 N	109	127	66	-61	33	41	39	-2

Mean Max Queues (m)			2028 AM				2028 PM			
	Junction	Approach	Base	WoD	WD Mit	Miti - WoD	Base	WoD	WD Mit	Miti - WoD
1	Finger Farm	A453 W	25	71	24	-47	22	29	24	-5
2	Finger Farm	A453 N	20	34	46	12	13	17	27	10
3	Finger Farm	M1/A42 S	40	91	43	-48	19	24	16	-8
11	M1 J24	M1/A50	169	290	345	55	91	115	203	88
12	M1 J24	Remembrance Way	90	327	382	55	95	674	401	-273
13	M1 J24	Deby Road	41	66	69	3	33	45	54	9
15	M1 J24	A453 S	39	78	68	-10	68	81	87	6
16	M1 J24	Hilton Hotel Lane	23	80	61	-19	15	36	31	-5
17	M1 J24	M1 NB South of Slip	0	8	1	-7	0	0	0	0
20	M1 J24	M1 NB Off Slip	79	166	66	-100	52	73	50	-23
24	EMG1 Gyratory	Kegworth By-Pass	197	130	183	53	131	106	98	-8
25	EMG1 Gyratory	A453 S	129	402	89	-313	101	95	65	-30
26	EMG1 Gyratory	Wilders Way L-Turn	7	100	4	-96	7	10	11	1
27	EMG1 Gyratory	Wilders Way Ahead	3	10	5	-5	6	9	9	0
28	EMG1 Gyratory	A453 S Left turn	63	72	75	3	37	42	46	4
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	124	100	164	64	79	66	75	9
30	EMG1 Gyratory	A453 N	113	147	65	-82	36	42	40	-2
31	M1 J24	M1 SB Offlip (M1)	0	31	16	-15	0	0	0	0
32	M1 J24	M1 SB Offlip (A50)	0	17	11	-6	0	0	0	0

Table 28: Stage 2B 2028 Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD Mit	Miti - WoD	Base	WoD	WD Mit	Miti - WoD
1	Finger Farm	A453 W	30	143	36	-107	32	42	29	-12
2	Finger Farm	A453 N	29	37	52	14	27	19	32	13
3	Finger Farm	M1/A42 S	44	152	51	-100	25	35	18	-17
11	M1 J24	M1/A50	448	599	803	204	114	140	241	101
12	M1 J24	Remembrance Way	124	545	372	-174	127	1156	495	-661
13	M1 J24	Deby Road	53	69	74	5	37	55	60	5
15	M1 J24	A453 S	61	70	83	13	115	109	100	-9
16	M1 J24	Hilton Hotel Lane	33	99	80	-20	23	41	35	-6
17	M1 J24	M1 NB South of Slip	8	2	7	4	0	2	0	-2
20	M1 J24	M1 NB Off Slip	169	142	69	-73	64	124	55	-68
24	EMG1 Gyratory	Kegworth By-Pass	431	208	239	31	207	173	156	-17
25	EMG1 Gyratory	A453 S	153	748	113	-635	138	115	73	-42
26	EMG1 Gyratory	Wilders Way L-Turn	12	111	8	-103	17	15	26	11
27	EMG1 Gyratory	Wilders Way Ahead	7	13	8	-5	9	10	11	1
28	EMG1 Gyratory	A453 S Left turn	104	185	88	-97	55	51	53	3
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	246	182	221	40	136	101	133	32
30	EMG1 Gyratory	A453 N	176	153	76	-77	43	52	55	3

Maximum Queues (m)			2028 AM				2028 PM			
	Junction	Approach	Base	WoD	WD Mit	Miti - WoD	Base	WoD	WD Mit	Miti - WoD
1	Finger Farm	A453 W	39	146	35	-111	30	40	30	-10
2	Finger Farm	A453 N	48	56	54	-2	20	20	40	20
3	Finger Farm	M1/A42 S	49	146	54	-92	27	29	20	-9
11	M1 J24	M1/A50	279	430	418	-12	114	124	229	105
12	M1 J24	Remembrance Way	126	444	482	38	145	1002	516	-486
13	M1 J24	Deby Road	55	81	79	-2	39	53	68	15
15	M1 J24	A453 S	53	170	79	-91	98	92	96	4
16	M1 J24	Hilton Hotel Lane	34	101	79	-22	25	44	41	-3
17	M1 J24	M1 NB South of Slip	0	54	7	-47	0	2	0	-2
20	M1 J24	M1 NB Off Slip	109	321	73	-248	62	100	56	-44
24	EMG1 Gyratory	Kegworth By-Pass	423	224	266	42	182	160	134	-26
25	EMG1 Gyratory	A453 S	197	684	125	-559	118	111	71	-40
26	EMG1 Gyratory	Wilders Way L-Turn	16	209	8	-201	16	14	18	4
27	EMG1 Gyratory	Wilders Way Ahead	6	15	10	-5	10	11	13	2
28	EMG1 Gyratory	A453 S Left turn	105	110	92	-18	47	49	51	2
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	255	168	265	97	146	86	93	7
30	EMG1 Gyratory	A453 N	202	214	72	-142	52	49	48	-1
31	M1 J24	M1 SB Offlip (M1)	0	87	69	-18	0	0	0	0
32	M1 J24	M1 SB Offlip (A50)	0	154	42	-112	0	0	0	0

5.26 **Table 29** and **30** which sets the ~~average~~mean maximum and maximum queues for the 2038 without and with development traffic.

Table 29: Stage 2B 2038 ~~Average~~Mean Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD Mit	Miti – WoD	Base	WoD	WD Mit	Miti – WoD
1	Finger Farm	A453 W	24	51	27	-24	22	31	26	-4
2	Finger Farm	A453 N	20	38	49	11	13	19	31	12
3	Finger Farm	M1/A42 S	35	54	47	-7	19	24	19	-4
11	M1 J24	M1/A50	194	269	307	38	90	139	278	140
12	M1 J24	Remembrance Way	86	993	936	-57	94	1448	1334	-114
13	M1 J24	Deby Road	41	66	66	1	31	49	61	12
15	M1 J24	A453 S	41	69	76	8	70	84	108	24
16	M1 J24	Hilton Hotel Lane	23	33	26	-7	16	184	152	-33
17	M1 J24	M1 NB South of Slip	2	1916	2	-1915	0	7	0	-6
20	M1 J24	M1 NB Off Slip	95	608	72	-536	51	322	65	-256
24	EMG1 Gyratory	Kegworth By-Pass	192	259	219	-40	138	129	134	5
25	EMG1 Gyratory	A453 S	128	190	84	-106	102	91	72	-19
26	EMG1 Gyratory	Wilders Way L-Turn	4	8	5	-3	6	10	15	5
27	EMG1 Gyratory	Wilders Way Ahead	3	7	5	-2	6	9	10	1
28	EMG1 Gyratory	A453 S Left turn	65	59	67	8	38	40	42	2
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	105	205	197	-8	73	97	107	10
30	EMG1 Gyratory	A453 N	109	64	60	-4	33	37	43	6

Mean Max Queues (m)			2038 AM				2038 PM			
	Junction	Approach	Base	WoD	WD Mit	Miti - WoD	Base	WoD	WD Mit	Miti - WoD
1	Finger Farm	A453 W	25	43	28	-15	22	30	26	-4
2	Finger Farm	A453 N	20	38	49	11	13	19	30	11
3	Finger Farm	M1/A42 S	40	54	49	-5	19	23	20	-3
11	M1 J24	M1/A50	169	255	338	83	91	133	289	156
12	M1 J24	Remembrance Way	90	983	892	-91	95	1556	1323	-233
13	M1 J24	Deby Road	41	64	66	2	33	48	63	15
15	M1 J24	A453 S	39	68	77	9	68	82	108	26
16	M1 J24	Hilton Hotel Lane	23	32	25	-7	15	184	145	-39
17	M1 J24	M1 NB South of Slip	0	2745	2	-2743	0	18	0	-18
20	M1 J24	M1 NB Off Slip	79	608	71	-537	52	355	65	-290
24	EMG1 Gyratory	Kegworth By-Pass	197	190	275	85	131	147	128	-19
25	EMG1 Gyratory	A453 S	129	154	96	-58	101	90	75	-15
26	EMG1 Gyratory	Wilders Way L-Turn	7	7	5	-2	7	12	15	3
27	EMG1 Gyratory	Wilders Way Ahead	3	7	5	-2	6	9	9	0
28	EMG1 Gyratory	A453 S Left turn	63	55	66	11	37	41	43	2
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	124	159	246	87	79	108	101	-7
30	EMG1 Gyratory	A453 N	113	67	61	-6	36	40	40	0
31	M1 J24	M1 SB Offlip (M1)	0	19	8	-11	0	0	0	0
32	M1 J24	M1 SB Offlip (A50)	0	17	8	-9	0	0	0	0

Table 30: Stage 2B 2038 Maximum Queue Comparison (Metres)

Location			AM				PM			
	Junction	Approach	Base	WoD	WD Mit	Miti – WoD	Base	WoD	WD Mit	Miti – WoD
1	Finger Farm	A453 W	30	84	35	-49	32	43	54	11
2	Finger Farm	A453 N	29	49	57	8	27	23	43	21
3	Finger Farm	M1/A42 S	44	84	67	-17	25	33	26	-7
11	M1 J24	M1/A50	448	362	358	-5	114	161	307	146
12	M1 J24	Remembrance Way	124	1274	1384	110	127	2009	2008	-1
13	M1 J24	Deby Road	53	78	88	10	37	57	81	24
15	M1 J24	A453 S	61	82	88	5	115	98	140	41
16	M1 J24	Hilton Hotel Lane	33	40	31	-9	23	208	185	-22
17	M1 J24	M1 NB South of Slip	8	2010	11	-1999	0	28	2	-26
20	M1 J24	M1 NB Off Slip	169	609	80	-529	64	418	78	-340
24	EMG1 Gyratory	Kegworth By-Pass	431	344	288	-55	207	187	206	19
25	EMG1 Gyratory	A453 S	153	254	97	-157	138	104	97	-6
26	EMG1 Gyratory	Wilders Way L-Turn	12	16	9	-7	17	17	24	8
27	EMG1 Gyratory	Wilders Way Ahead	7	12	7	-5	9	12	12	-1
28	EMG1 Gyratory	A453 S Left turn	104	68	88	20	55	52	49	-3
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	246	288	288	0	136	133	196	64
30	EMG1 Gyratory	A453 N	176	82	71	-10	43	45	50	5

Maximum Queues (m)			2038 AM				2038 PM			
	Junction	Approach	Base	WoD	WD Mit	Miti - WoD	Base	WoD	WD Mit	Miti - WoD
1	Finger Farm	A453 W	39	75	40	-35	30	37	43	6
2	Finger Farm	A453 N	48	48	63	15	20	26	42	16
3	Finger Farm	M1/A42 S	49	88	64	-24	27	29	35	6
11	M1 J24	M1/A50	279	349	386	37	114	153	320	167
12	M1 J24	Remembrance Way	126	1283	1291	8	145	2465	2243	-222
13	M1 J24	Deby Road	55	73	90	17	39	55	79	24
15	M1 J24	A453 S	53	76	89	13	98	94	144	50
16	M1 J24	Hilton Hotel Lane	34	39	29	-10	25	218	193	-25
17	M1 J24	M1 NB South of Slip	0	3010	11	-2999	0	65	2	-63
20	M1 J24	M1 NB Off Slip	109	609	82	-527	62	455	76	-379
24	EMG1 Gyratory	Kegworth By-Pass	423	246	465	219	182	216	185	-31
25	EMG1 Gyratory	A453 S	197	208	141	-67	118	103	106	3
26	EMG1 Gyratory	Wilders Way L-Turn	16	15	10	-5	16	18	27	9
27	EMG1 Gyratory	Wilders Way Ahead	6	10	7	-3	10	11	12	1
28	EMG1 Gyratory	A453 S Left turn	105	67	92	25	47	53	49	-4
29	EMG1 Gyratory	Kegworth By-Pass Left Turn	255	235	390	155	146	134	136	2
30	EMG1 Gyratory	A453 N	202	90	73	-17	52	46	50	4
31	M1 J24	M1 SB Offlip (M1)	0	35	46	11	0	0	0	0
32	M1 J24	M1 SB Offlip (A50)	0	83	23	-60	0	0	0	0

5.27 The tables above shows that the proposed mitigation provides significant reduction in both the ~~average~~mean maximum and maximum queues for both 2028 and 2038 in the B scenarios. That is again apart from the M1/A50 approach, which increases in the PM.

5.28 This is a result of the proposed mitigation allowing more circulating traffic into J24 which in turn causes the MOVA to naturally provide more green time to the circulatory to avoid the circulatory becoming too congested.

5.29 Journey time and queue comparison graphs are provided within **Appendix 3** and **4** respectively for all scenarios

Network Performance

5.30 **Table 31** below sets out the network performance comparison for all scenarios at the 2028 future year.

Table 31: Stage 2B 2028 Network Performance Comparison

Peak Hour	Scenario	Delay (~~secs~~)	Speed (mph)	Veh Arr (veh)	Latent Delay (s)	Latent Demand (Veh)
AM	2024 Base	52	48.6	18740	1401	1
	WoD	81	44.~~7~~6	2024~~8~~21~~253~~	~~221~~72133	1
	WD	~~1~~34133	38.35	~~216~~95217~~61~~	~~449~~714652	~~1~~4
	WD Mit	~~72~~71	45.7	~~2219~~822217	~~257~~02572	1
	WD – ~~WD~~WoD	~~54~~52	-6.31	~~44~~21513	~~228~~012519	~~0~~3
	Mit – WoD	-~~9~~10	1.~~0~~2	~~945~~1969	~~35~~4439	0
PM	2024 Base	41	52	18541	2336	1
	WoD	~~75~~72	46.59	~~212~~44~~2~~1255	~~5656~~356562	11
	WD	~~100~~98	42.47	~~221~~34~~2~~2145	~~156964~~155640	66
	WD Mit	71	46.8	~~223~~59~~2~~2346	~~126651~~126646	55
	WD – ~~WD~~WoD	26	-4.~~1~~2	890	~~100401~~99077	55
	Mit – WoD	-41	-0.31	1091~~1115~~	~~7008~~870084	44

5.31 When comparing the results of the 'with development' scenario including for mitigation against the 'without development' scenario, the average delay reduces significantly in

the morning peak hour (~~9~~10 seconds), and the average speed and vehicles arriving increases significantly (+~~1mph~~1.2mph and ~~945~~1969 vehicles respectively). The latent demand would remain at 1 vehicle.

5.32 In the evening peak hour, the average delay decreases slightly by ~~4~~1 seconds, the average speed decreases slightly by -0.~~3mph~~1mph. The number of vehicles arriving in the network increases by ~~1115~~1091 vehicles, and the latent demand increases by 44 vehicles, which is a positive overall in that the Strategic Road Network is able to accommodate a higher number of vehicles.

5.33 The benefit of the mitigation is also shown in the journey time tables which show a number of routes reducing in time once the mitigation scheme is introduced which re-enforces the above.

5.34 **Table 32** summarises the network performance comparison for all scenarios at the 2038 future year.

Table 32: Stage 2B 2038 Network Performance Comparison

Peak Hour	Scenario	Delay (secss)	Speed (mph)	Veh Arr (veh)	Latent Delay (s)	Latent Demand (Veh)
AM	2024 Base	52	48.6	18740	1401	1
	WoD	164	36.0	~~2150~~21514	~~397194~~445083	~~475~~502
	WD	~~202~~203	32.~~6~~5	~~2201~~421984	~~834631~~849994	~~707~~726
	WD Mit	93	43.~~2~~1	~~2315~~23170	~~3491~~4927	1
	WD - ~~WD~~WoD	38	-3.4	~~508~~470	~~437437~~404911	~~232~~225
	Mit - WoD	-71	7.1	~~1649~~1656	-393703440156	-~~474~~501
PM	2024 Base	41	52	18541	2336	1
	WoD	~~108~~110	42.~~3~~0	~~2232~~822299	~~516536~~516565	252
	WD	~~163~~132	~~36.9~~38.8	~~2245~~923177	~~914689~~790090	~~648~~382
	WD Mit	~~114~~113	41.~~2~~3	~~2308~~923109	~~717282~~717304	357
	WD - ~~WD~~WoD	~~55~~23	~~-5.4~~3.2	~~131~~878	~~398153~~273525	~~396~~130
	Mit - WoD	~~7~~3	~~-1.1~~0.7	~~761~~810	~~200746~~200739	105

5.35 Similarly to the 2028 assessment, the 2038 results show that the average delay reduces, considerably still in the morning peak hour (71 seconds), which results in higher average speeds and an additional ~~508~~1656 vehicles arriving through the network area. The latent demand would significantly decrease by ~~474~~501.

5.36 In the evening peak hour, the average delay increases slightly by ~~7~~3 seconds, but from a low base (the evening peak operates far better overall than the morning peak hour, which has always been the key peak hour of the two assessed). The average speed decreases slightly by ~~1.1mph~~0.7mph. The number of vehicles arriving in the network increases by ~~761~~801 vehicles, and the latent demand increases by 105, which is a positive overall in that the Strategic Road Network is able to accommodate a higher number of vehicles.

5.37 Also journey times for the 2038 with mitigation scenarios show a number of routes decreasing in time taken which is a positive and illustrates that the mitigation scheme

provided a major benefit to the Strategic Road Network. **Appendix 5** sets out where the Latent Demand is on the highway network.

5.38 Therefore the results show that the proposed mitigation scheme provides a sufficient benefit for the Strategic Road Network especially at M1 J24.

5.39 In summary, the results show that, with the comprehensive mitigation strategy included for the highway network within the VISSIM model, extending from the EMG2 site access to M1 Junction 24, would, overall, provide significant benefit. When considered the key areas within the network in greater detail, in summary:

i) A453/Hunter Road/EMG2 site access roundabout – traffic would be able to safely enter and exit the EMG2 site in any given scenario; vehicles would struggle to exit Hunter Road without the mitigation measures included for; hence the proposals provide betterment on said arm.

ii) Toucan crossing on the A453 – this operates within capacity when called, without any negative blocking back to either roundabout east or west.

iii) Finger Farm – the gyratory works well once the in mitigation is in place, as there are far less vehicles wanting to use the A453 when comparing to the base scenarios once the new M1 to A50 link road is included for.

iv) A453/Kegworth Bypass/EMG1 site access gyratory – while there is not an inherit capacity issue at EMG1 site access gyratory, the addition of a second right turn lane from the A453 southbound into EMG1 in affect future proofs the junction by increasing storage capacity within it and should also help alleviate the potential collision issue raised, as and the extra lane will help prevent vehicles from trying to manoeuvre around any queuing vehicles to enter the preceding two lane section into EMG1.

v) M1 Junction 24 diverge slip roads - in the base scenarios there is severe queuing forecast on both the M1 diverge slip road approaches, with vehicles queuing back onto the mainline to M1 Junction 23A to the south in the morning peak hour in particular, With the mitigation strategy included for, there is still queuing back onto the M1 mainline, but this is vastly improved, especially on the northbound approach, where the queue does not prejudice the operation of the proposed M1 northbound to A50 westbound link road and allows vehicles to access it. It is also worth reminding that the Stage 2A assessment work includes for all of the Ratcliffe on Soar Power Station redevelopment traffic in the baseline but not any mitigation, because it is unknown at this stage of the process. Either way, the improved operation will help improve the PIC record observed on the M1 northbound diverge slip road.

vi) M1 Junction 24 circulatory links – the inclusion of the additional lane on the western side of the junction increases capacity as it allows for more vehicles to access the junction and manoeuvre through it quicker. This in turn allows the MOVA at the junction to assign more green time to the busier arms (M1 southbound/A50, A453 Remembrance Way, and M1 northbound approaches), allowing for additional vehicles to enter the model. For the avoidance of doubt,

the mitigation does not go as far as resolving all capacity issues at M1 Junction 24, especially on the A453 Remembrance Way arm and M1 southbound and A50 approach, but neither does it prejudice its operation either, over and above the congestion anticipated if the Ratcliffe on Soar Power Station is fully redeveloped in Stage 2A but without any further mitigation included for at this stage of the process (because it is not currently known).

vii) New M1 to A50 link road – whilst this introduces another conflict point, as result the removal of the current two to one merge on the exit from M1 Junction 24 to provide two full lanes, and the merge with the separated left turn lane, it reduces the number of conflict points overall. This in turn helps the A50 heading west from M1Junction 24, including for the new link road merge, to operate safely and within capacity.

6. SUMMARY & CONCLUSIONS

6.1 BWB Consulting Ltd (BWB) has been appointed by SEGRO (the Applicant) to produce a microsimulation traffic model of the M1 Junction 24 and Strategic Road Network in the vicinity to support a DCO application for the Phase 2 Expansion of East Midlands Gateway 2 development (EMG2).

6.2 The EMG2 Project comprises a second phase to Segro's EMG1 logistics park and Rail Freight Interchange and comprises the following three components:

- **EMG2 Main Site** – A new logistics and advanced manufacturing employment park located south of East Midlands Airport and the A453, and west of the M1 motorway. This part of the site falls within the 'East Midlands Airport and Gateway Industrial Cluster' (EMAGIC) site, which forms part of the East Midlands Freeport designated by the Government in 2022. It comprises 300,000sqm of B2/B8 use (assessed as 60,000sqm B2 and 240,000sqm B8 as set out in Section 7 below), plus an allowance for 200,000sqm of B8 mezzanine floorspace.

- **Highways Works** – Highways works to the SRN including improvements at Junction 24 of the M1 motorway and the road network interacting with that junction; and

- **EMG1 Works** – Additional warehousing of 26,500sqm plus a mezzanine allowance for 3,500 sqm (Use Class B8) at Plot 16 together with works to increase the permitted height of the cranes at the rail freight terminal, improvements to the EMG1 public transport interchange and site management building.

6.3 A VISSIM model had been developed for the M1 J24 corridor and it was agreed with the TWG that the following four junctions are tested using microsimulation VISSIM modelling because of their proximity to the SRN

i. Junction 2: A453/Hunter Road Roundabout
ii. Junction 3: Finger Farm Roundabout
iii. Junction 4: A453/EMGP1 Signal Gyratory
iv. Junction 5: M1 Junction 24

6.4 Junction modelling assessments for the Stage 1A core and 1B sensitivity forecast year scenarios have been carried out using VISSIM.

6.5 The VISSIM showed that in the forecast assessment year the corridor of junctions set out above would have capacity issues with the EMG2 development traffic only included for, and as a result a mitigation scheme has been proposed.

6.6 The proposed highways works are described further as follows:

- A453/EMG2 Main Site access junction – providing access to the EMG2 Main Site via a new arm from the A453/Hunter Road roundabout (DCO Works No. 6).
- M1 Junction 24 improvements comprising:

- Construction of a new free-flow link road from the M1 northbound to provide a direct link to the A50 westbound, which will cross over the A453, and will include the A50 westbound merge alterations (DCO Works Nos. 9 and 10);
- Widening of the A50 eastbound link at J24 and other related works and traffic management measures in this location (DCO Works No. 11);
- Alteration of the west side of the J24 roundabout to provide three lanes from the M1 northbound to A453 northbound through the junction, two lanes from the A453 northbound to the M1 northbound through the junction and removal of the segregated left-turn lane from the A453 northbound to the A50 westbound post feedback from NH (DCO Works No. 12a);
- Signing and lining amendments on the east side of the J24 roundabout and the A453 southbound approach (DCO Works No. 12b);
- Provision of new M1 northbound exit to the A50 and associated improvements to gantries signage, signals and road markings on the M1 (DCO Works No. 8); and
- Changes to the signage on the M1 northbound before J23A to sign the A50 via the new M1 J24 link road rather than via J23A as at present (DCO Works No. 16).

- A6 Kegworth Bypass/A453 Junction Improvements providing widening at the EMG1 roundabout to increase junction capacity to accommodate traffic generation from the EMG2 Main Site (DCO Works No. 13).
- Works to the A453/A42/Finger Farm roundabout (DCO Works No 18).

6.7 The mitigation scheme showed that it would provide major benefits especially at M1 J24 when comparing journey times. The mitigation package was then coded into PRTM to see how it would affect the re-routing of traffic around the local area.

6.8 PRTM showed that the mitigation scheme would draw vehicles back onto the SRN and as a result AECOM provided Stage 2A/B modelling outputs to allow the revised traffic flows to be tested in VISSIM to determine if the mitigation scheme can still accommodate the re-routing of traffic.

6.9 The initial runs in VISSIM showed that with the increase in traffic due to the re-routing of traffic resulted in the need for further minor mitigation at M1 J24.

6.10 With the further mitigation measures in place, they provide a major benefit to the SRN overall. As a result the EMG2 DCO and associated MCO should be acceptable to the relevant authorities with said mitigation strategy included for.

APPENDICES

APPENDIX 1: CONVERGENCE SUMMARY

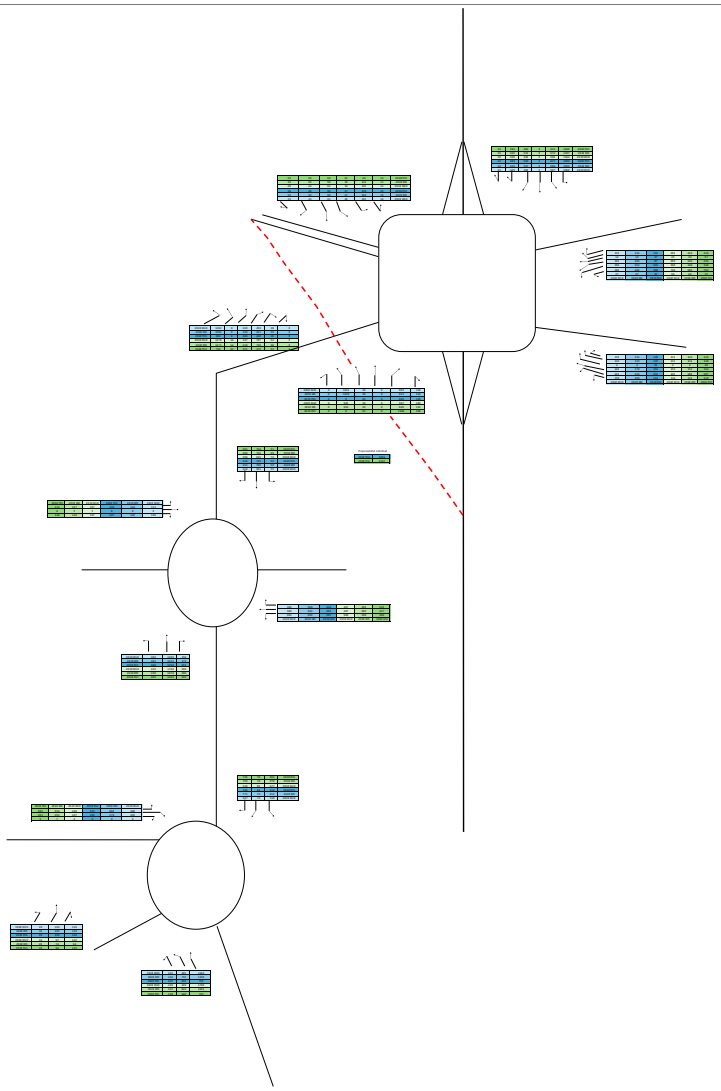
	Traffic Volume															
	Stage 1A								Stage 1B							
	2038 WoD		2028 WoD		2038 WD		2028 WD		2038 WoD		2028 WoD		2038 WD		2028 WD	
Sim Run	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	100%	100%	99%	100%	100%	99%	99%	100%	79%	95%	81%	98%	97%	100%	100%	99%
2	99%	100%	97%	99%	97%	99%	98%	99%	96%	99%	95%	98%	96%	100%	98%	99%
3	99%	100%	99%	99%	98%	100%	98%	99%	97%	100%	99%	99%	94%	100%	97%	99%
4	99%	100%	97%	99%	99%	99%	98%	99%	97%	100%	99%	98%	95%	100%	98%	100%
5	100%	100%	97%	97%	98%	100%	99%	100%	100%	100%	99%	99%	97%	99%	98%	100%

	Vehicle Travel Time															
	Stage 1A								Stage 1B							
Sim Run	2038 WoD		2028 WoD		2038 WD		2028 WD		2038 WoD		2028 WoD		2038 WD		2028 WD	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	95%	97%	95%	98%	97%	98%	97%	98%	85%	98%	84%	98%	100%	100%	95%	92%
2	99%	99%	99%	99%	99%	100%	98%	100%	100%	99%	99%	96%	99%	97%	97%	96%
3	99%	100%	95%	99%	99%	99%	98%	99%	98%	99%	99%	99%	98%	99%	100%	96%
4	100%	99%	97%	96%	99%	99%	99%	99%	99%	100%	99%	99%	99%	100%	96%	100%
5	99%	99%	98%	99%	99%	99%	99%	100%	100%	99%	100%	99%	99%	100%	100%	97%

	Traffic Volume							
	Stage 2A				Stage 2B			
	2038 Miti		2028 Miti		2038 Miti		2028 Miti	
Sim Run	AM	PM	AM	PM	AM	PM	AM	PM
1	99%	97%	99%	99%	99%	98%	98%	99%
2	100%	98%	98%	99%	100%	99%	100%	100%
3	100%	99%	99%	100%	100%	99%	100%	99%
4	100%	98%	98%	100%	100%	100%	100%	100%
5	100%	99%	99%	100%	100%	100%	100%	98%

	Vehicle Travel Time							
	Stage 2A				Stage 2B			
	2038 Miti		2028 Miti		2038 Miti		2028 Miti	
Sim Run	AM	PM	AM	PM	AM	PM	AM	PM
1	95%	96%	100%	99%	94%	99%	98%	99%
2	95%	99%	100%	94%	99%	100%	99%	99%
3	95%	99%	100%	99%	96%	100%	100%	100%
4	95%	99%	100%	96%	99%	100%	99%	100%
5	96%	100%	100%	99%	99%	100%	99%	99%

APPENDIX 2: FORECAST TRAFFIC FLOW DIAGRAMS



Birmingham
Livery Place, 35 Livery Street,
Colmore Business District,
Birmingham, B3 2PB
T: 0121 233 3322

Leeds
Whitehall Waterfront, 2 Riverside
Way, Leeds LS1 4EH
T: 0113 233 8000

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11 Borough High Street
London, SE1 9SE
T: 020 7407 3879

Manchester
4th Floor Carvers Warehouse, 77
Dale StreetManchester, M1 2HG
T: 0161 233 4260

Nottingham
Waterfront House, Station Street,
Nottingham NG2 3DQ
T: 0115 924 1100

Project

East Midlands Gateway Phase 2

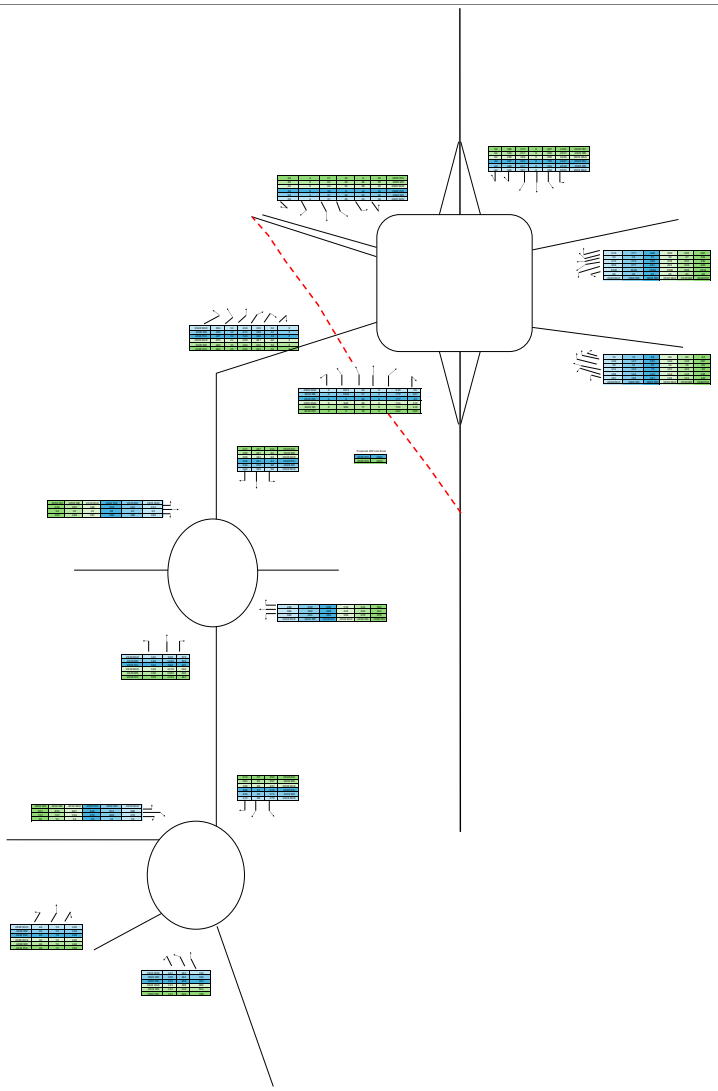
Drawing Title

Stage A Flow Comparison AM (Total Vehicles)

Drawn	CC	**Approved**	VD
Checked	CC	**Date**	18.02.26

Project Number

220500



Birmingham
Livery Place, 35 Livery Street,
Colmore Business District,
Birmingham, B3 2PB
T: 0121 233 3322

Leeds
Whitehall Waterfront, 2 Riverside
Way, Leeds LS1 4EH
T: 0113 233 8000

London
11 Borough High Street
London, SE1 9SE
T: 020 7407 3879

Manchester
4th Floor Carvers Warehouse, 77
Dale StreetManchester, M1 2HG
T: 0161 233 4260

Nottingham
Waterfront House, Station Street,
Nottingham NG2 3DQ
T: 0115 924 1100

Project

East Midlands Gateway Phase 2

Drawing Title

Stage A Flow Comparison PM (Total Vehicles)

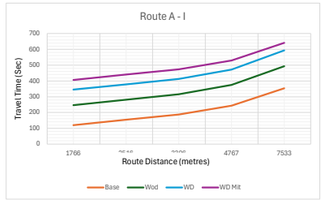
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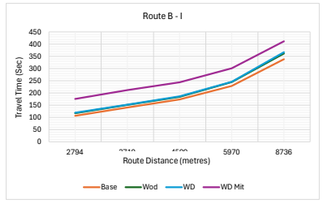
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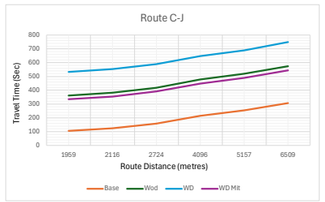
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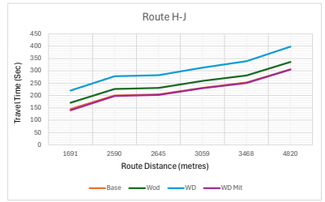
APPENDIX 3: JOURNEY TIME COMPARISON GRAPHS

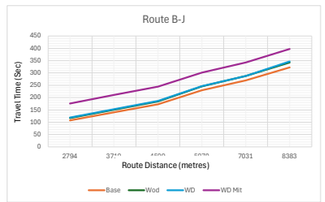
Stage 1/2A 2038 Morning Peak Hour Graphs

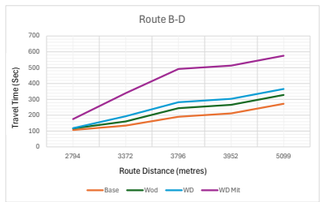


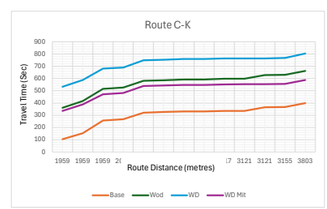


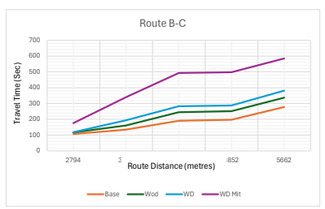


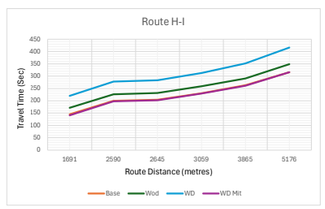


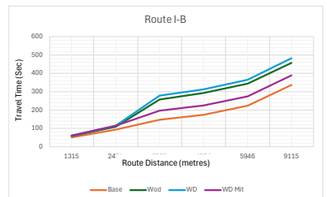


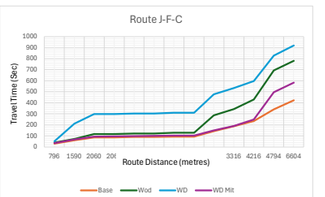


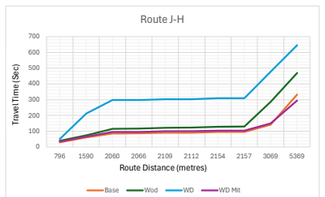


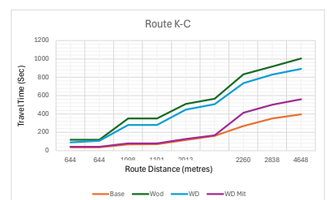


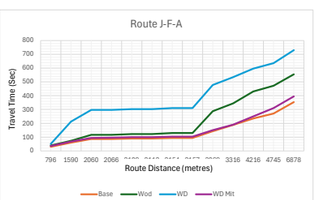


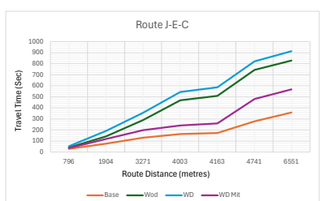


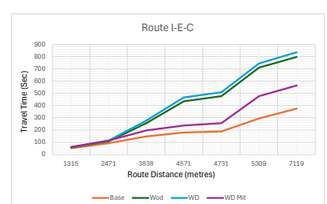


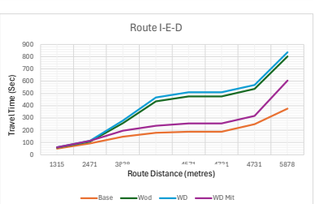




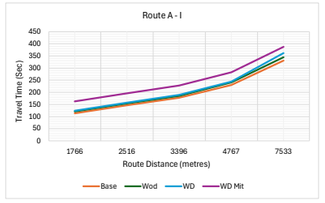


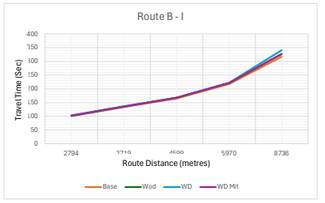


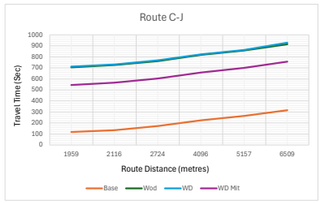


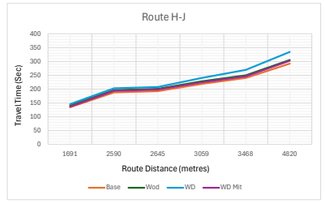


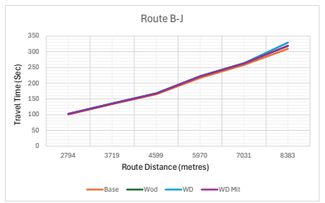
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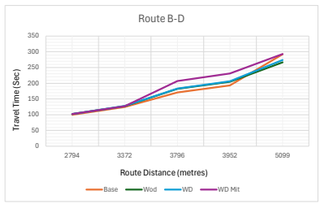


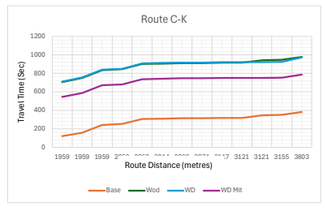


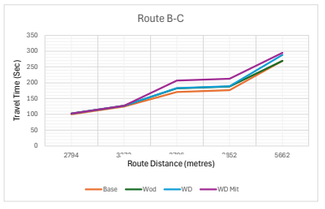


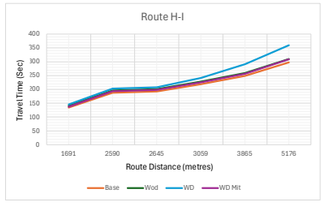




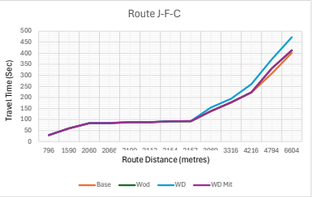


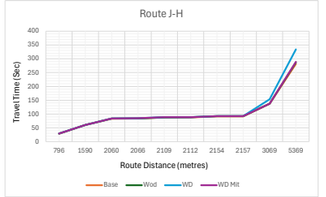


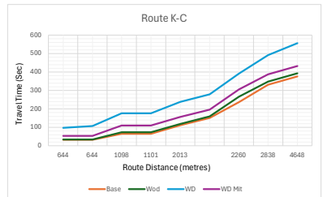


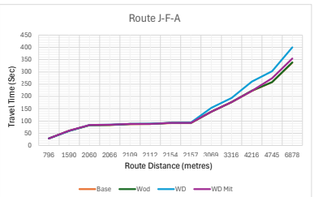


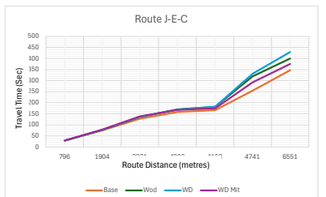


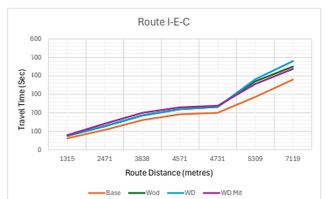


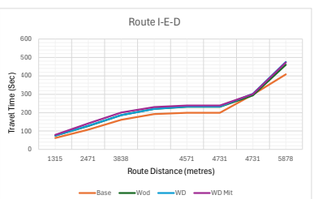




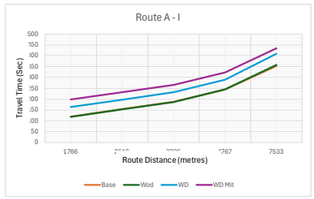


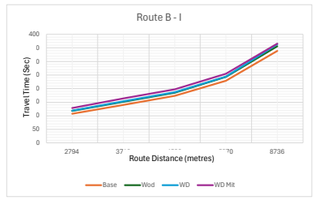


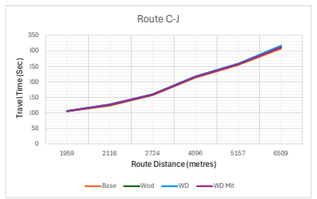


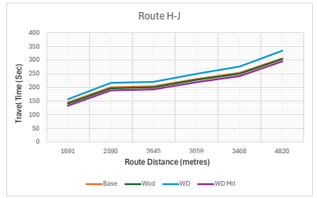


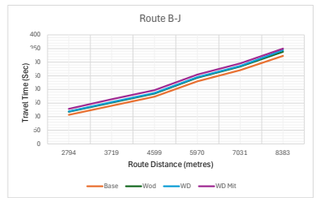
Stage 1/2A 2028 Morning Peak Hour Graphs

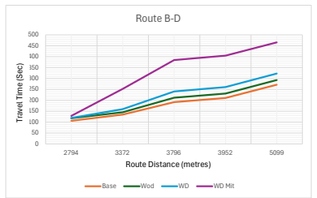


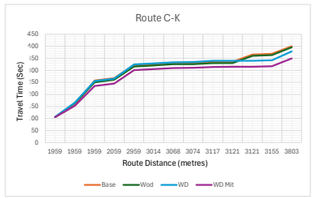


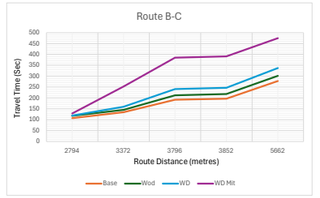


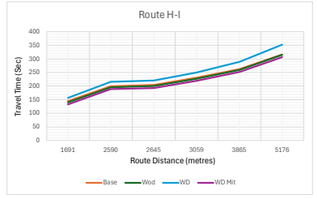


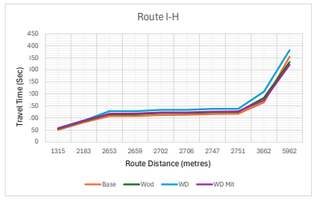


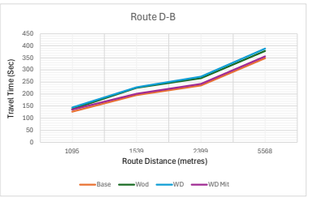


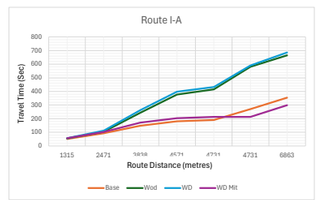


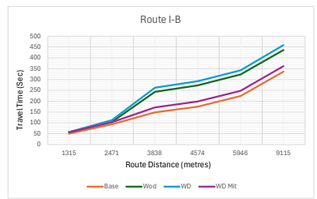


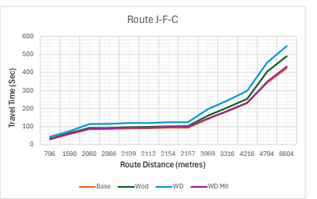


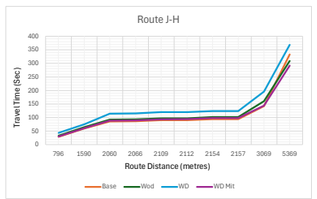


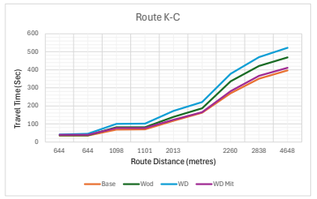


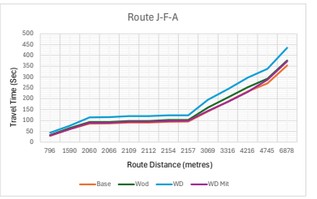


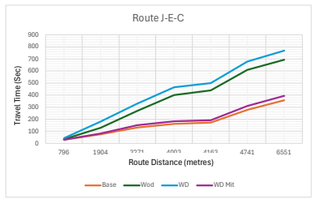


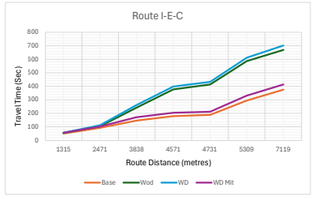


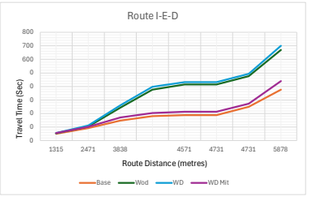




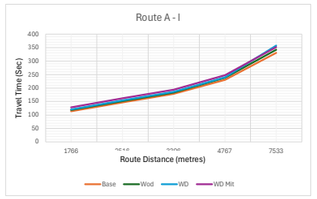


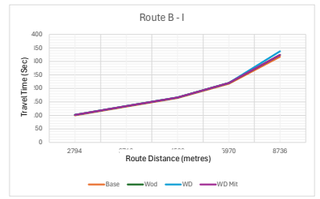




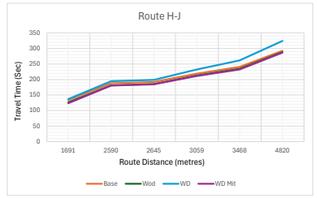


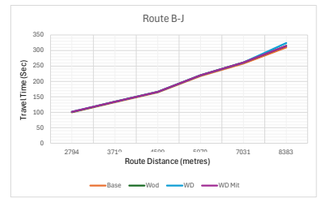
Stage 1/2A 2028 Evening Peak Hour Graphs

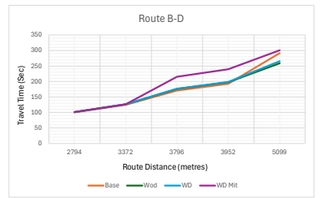


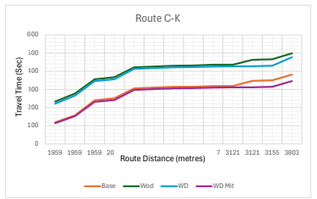


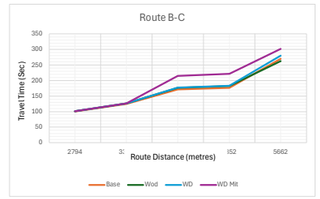


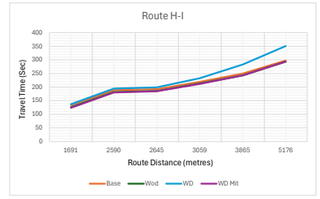


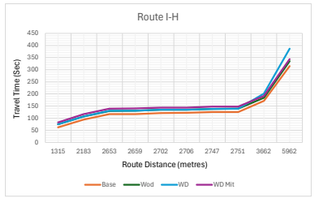


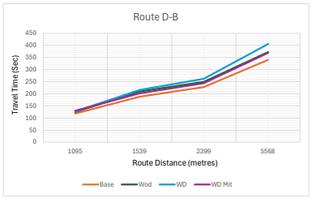


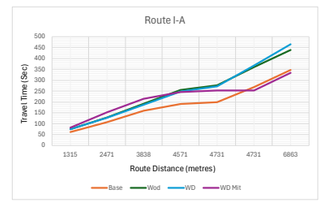


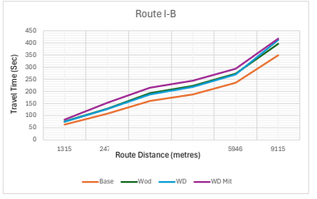


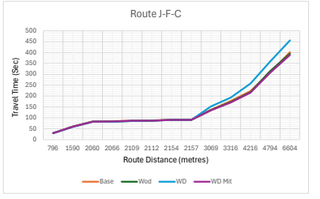


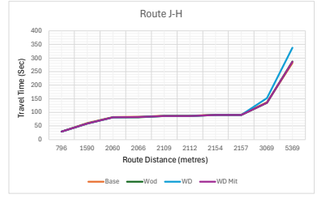


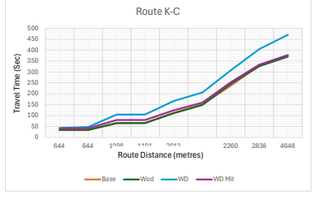


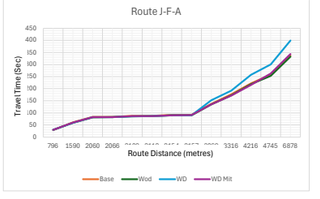


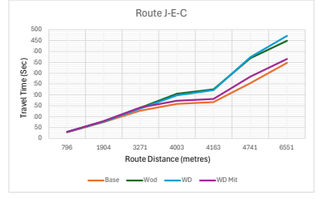


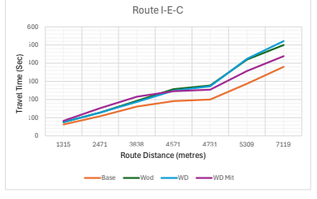


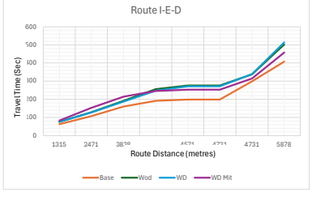




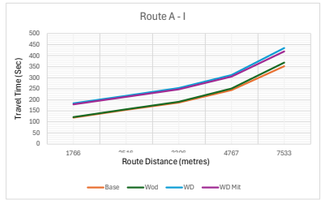


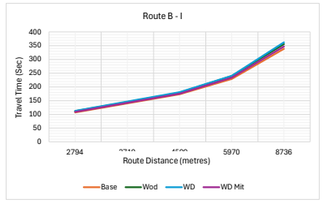


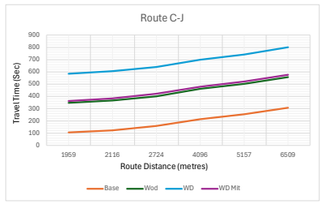


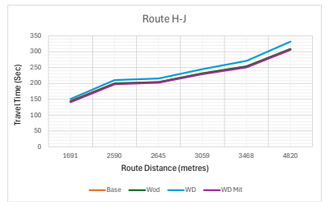


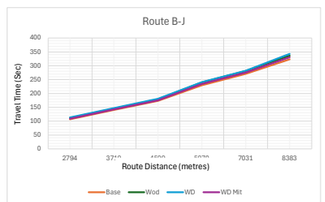
Stage 1/2B 2038 Morning Peak Hour Graphs

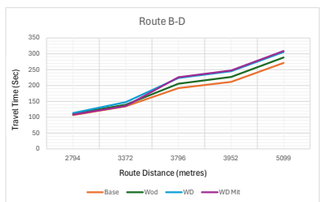


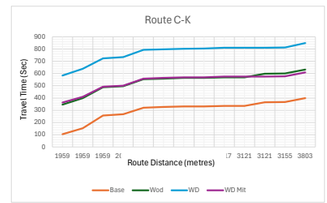


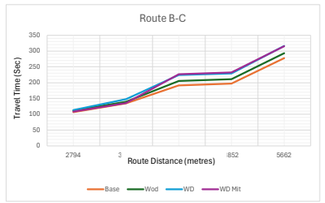


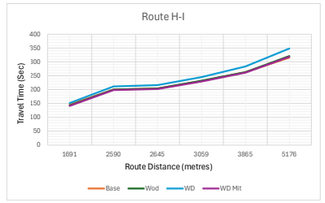


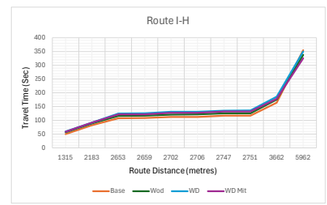


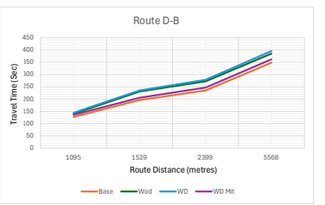


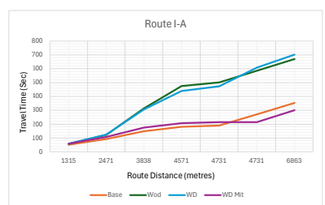


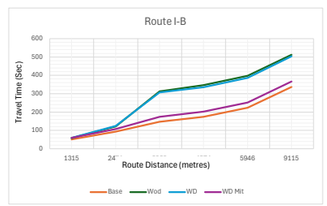


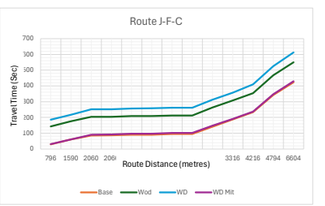


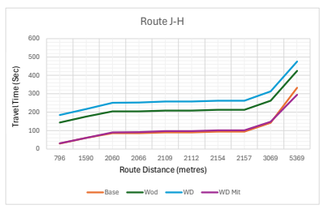


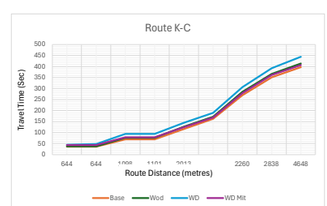


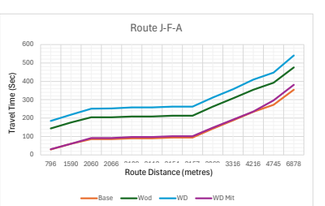


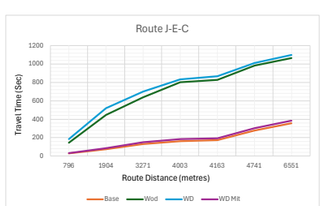


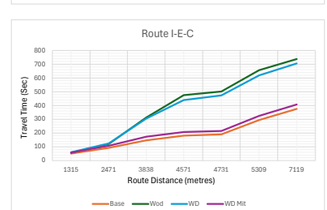


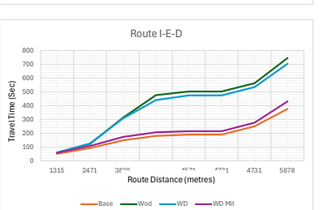




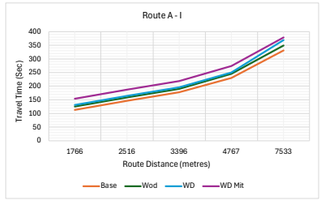


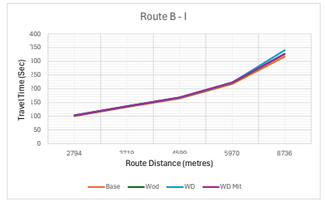




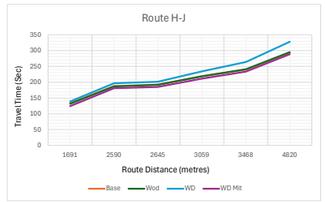


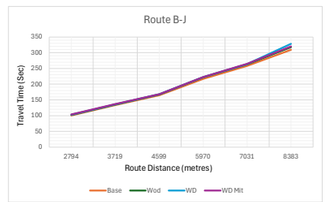
Stage 1/2B 2038 Evening Peak Hour Graphs

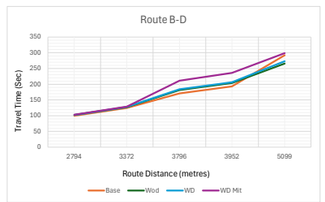


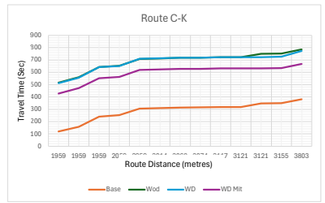


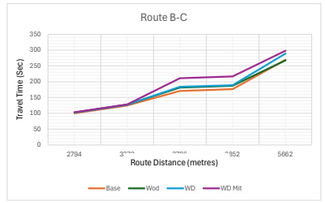


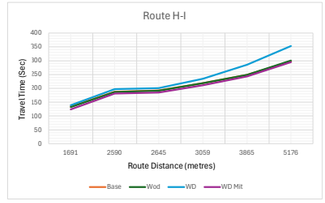


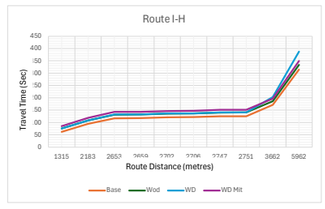


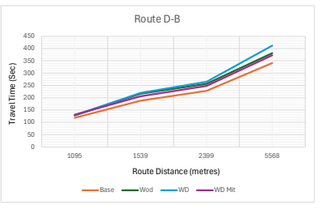


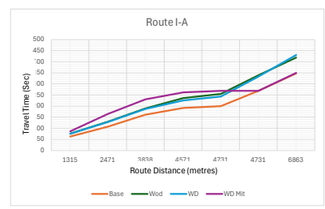


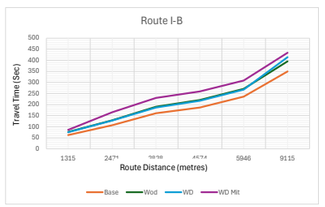


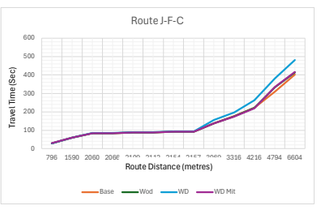


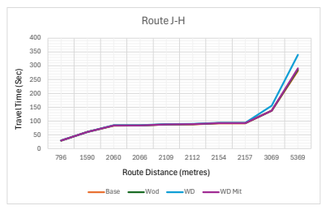


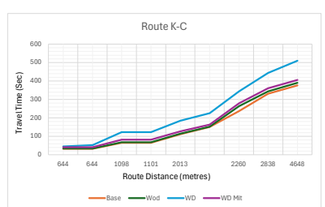


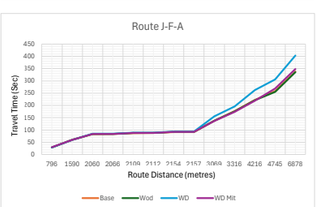


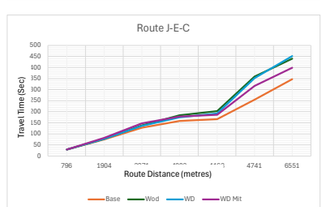


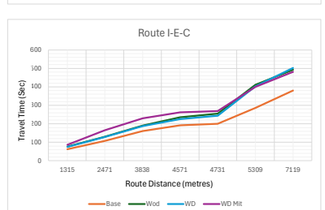






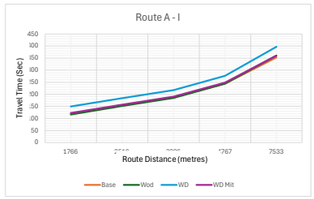


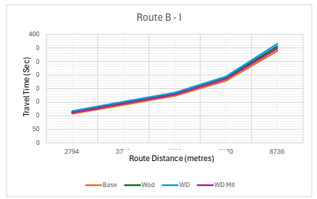


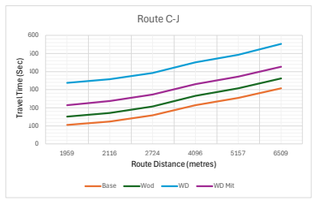


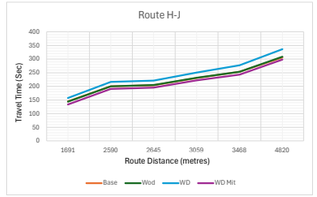


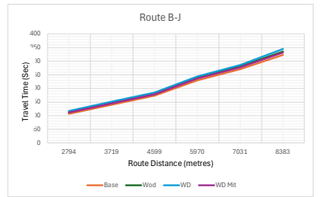
Stage 1/2B 2028 Morning Peak Hour Graphs

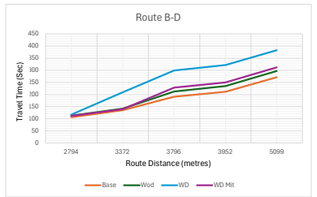


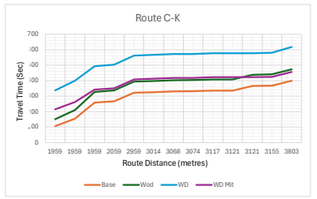


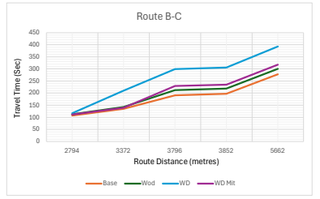


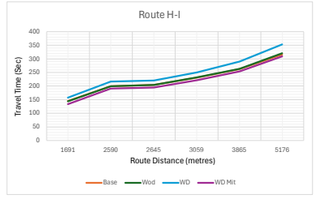


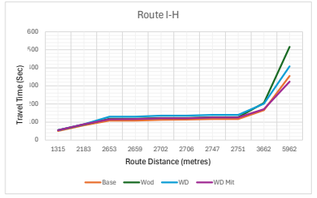




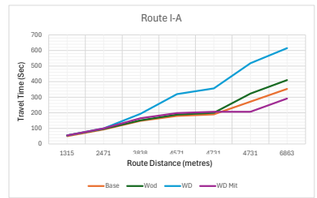


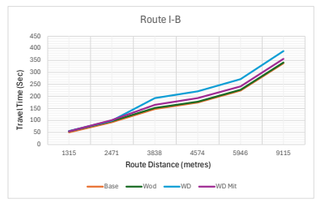


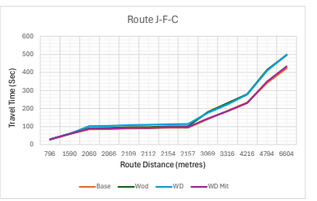


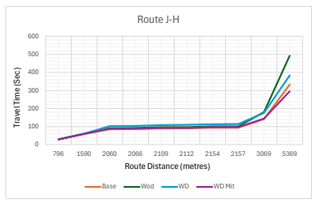


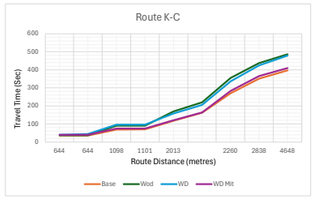


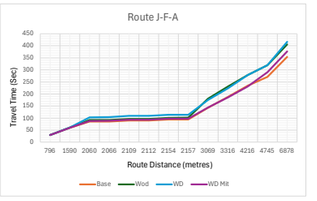


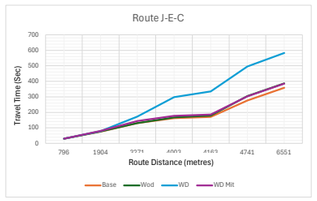


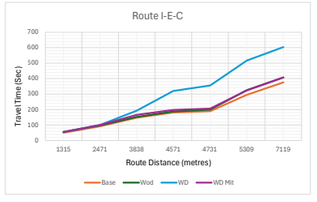


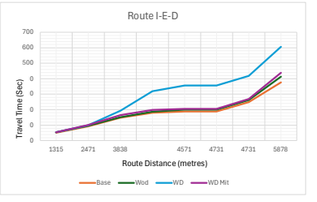




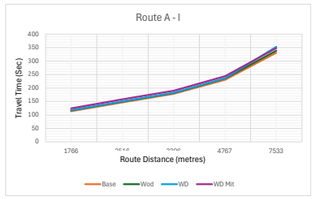


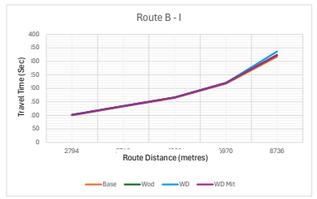


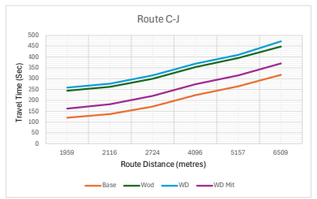


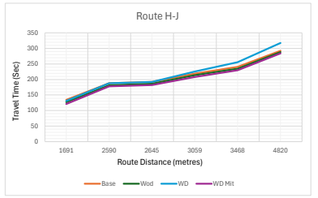


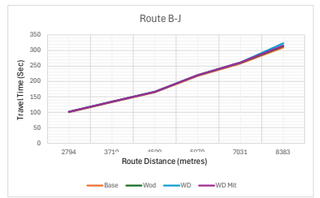
Stage 1/2B 2028 Evening Peak Hour Graphs

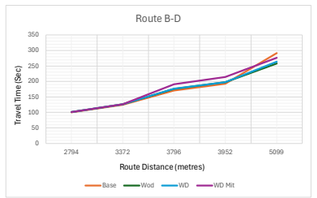


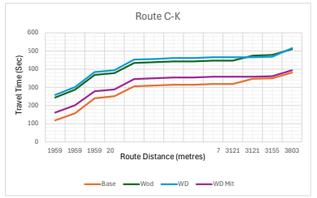


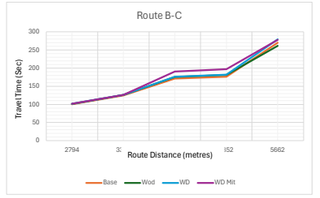


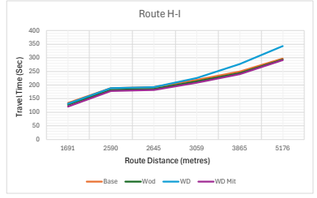


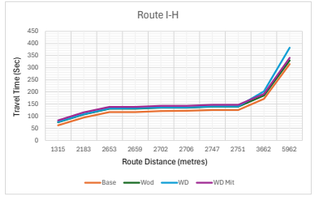


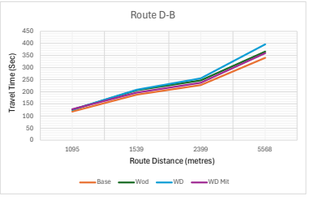


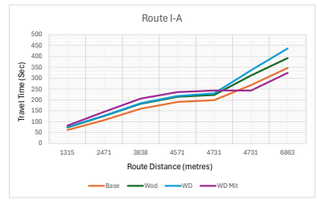


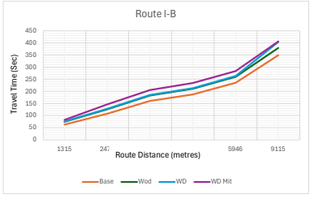


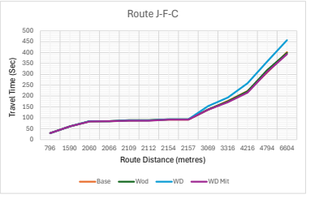


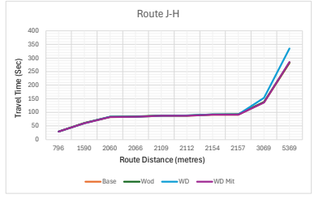


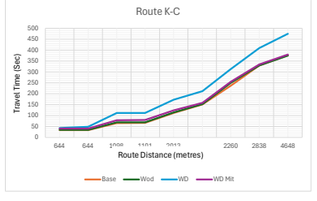


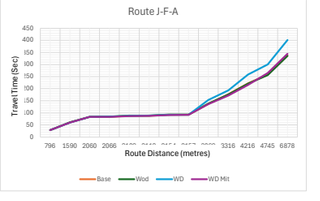


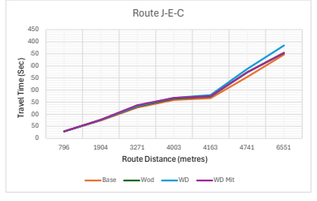


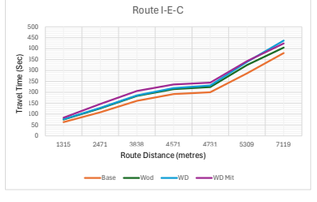


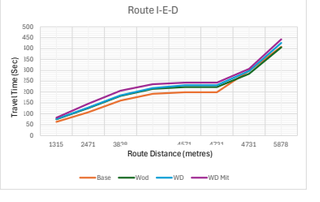




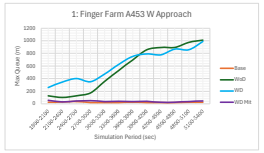


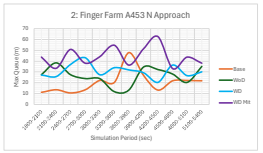


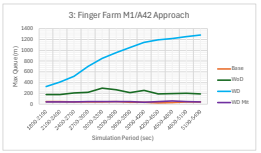


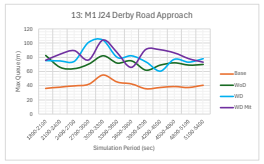


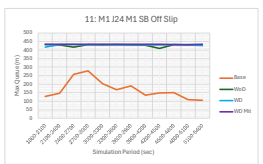
Stage 1/2A 2038 Morning Peak Hour Graphs

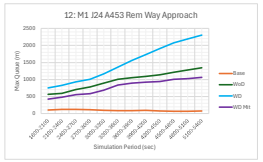


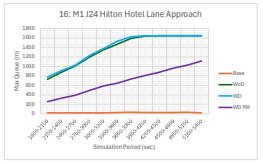


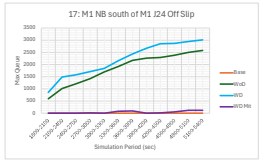


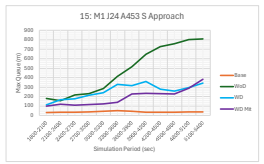


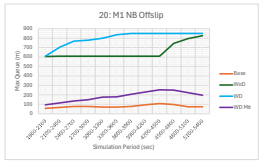


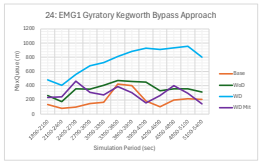


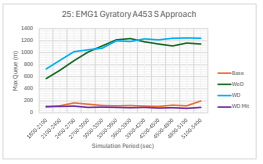


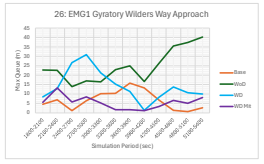


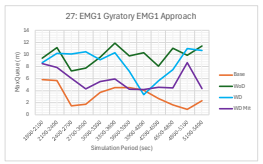


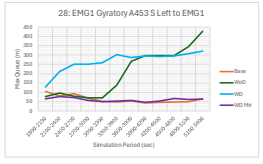


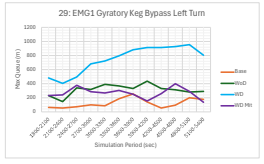


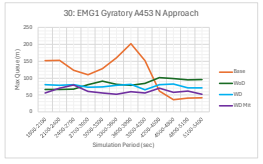


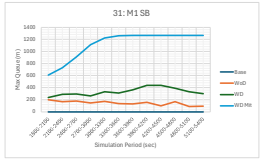


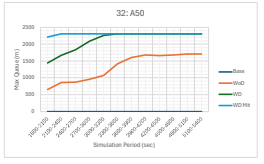




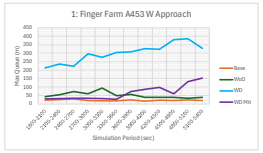


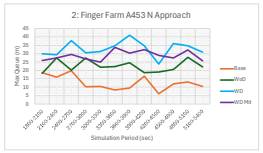


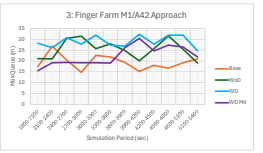


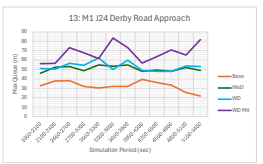


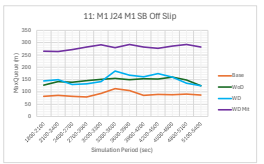
Stage 1/2A 2038 Evening Peak Hour Graphs

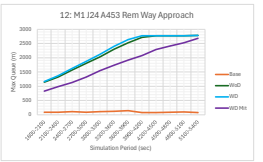


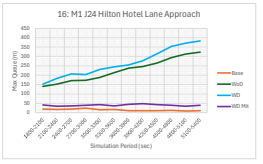


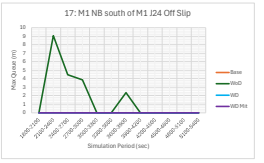


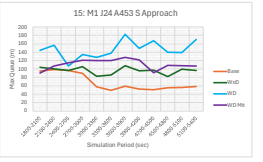


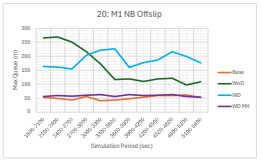


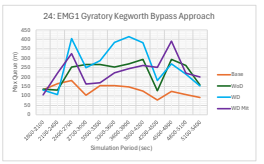


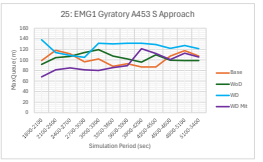


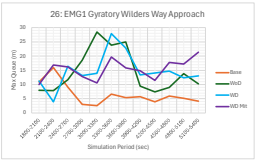


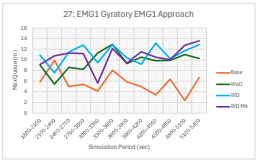


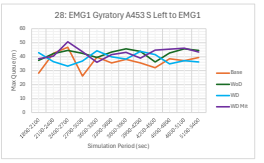


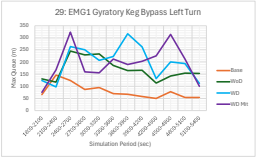


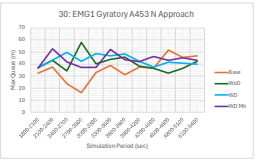


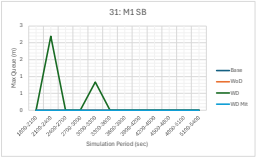


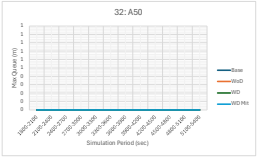




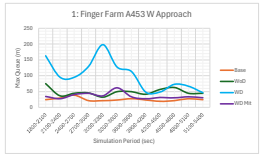


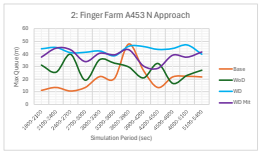


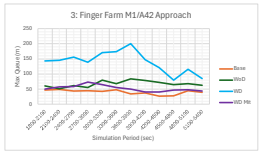


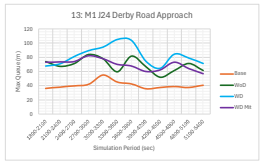


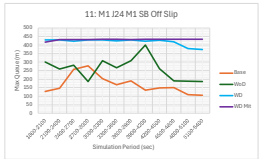
Stage 1/2A 2028 Morning Peak Hour Graphs

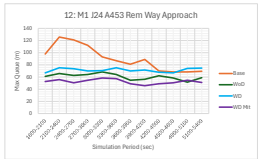


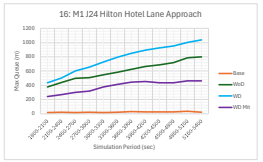


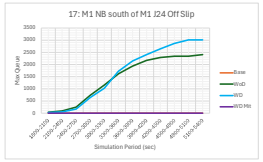


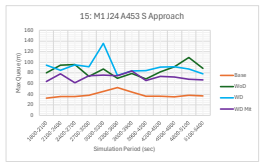


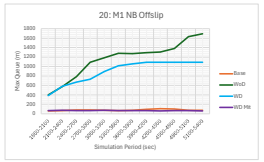


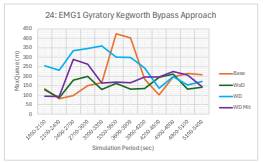


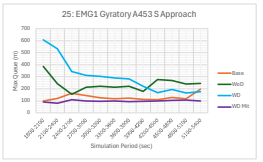


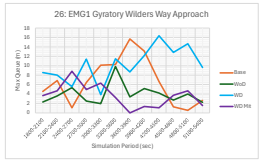


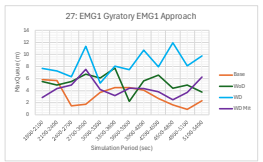


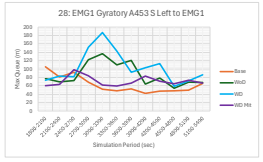


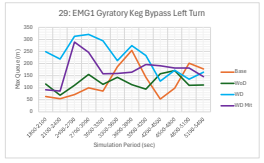


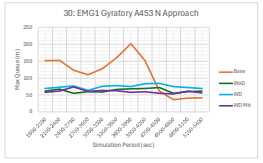


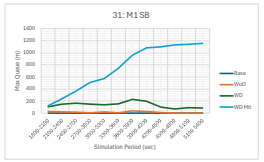


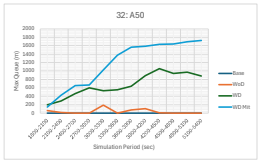




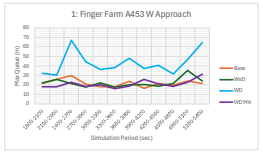


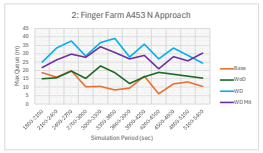


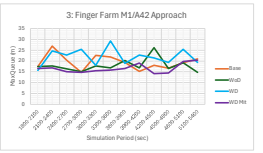


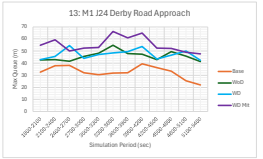


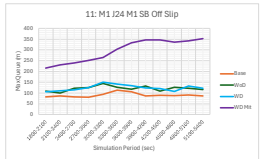
Stage 1/2A 2028 Evening Peak Hour Graphs

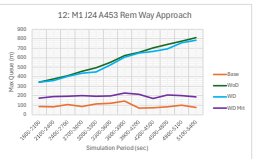


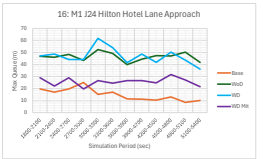


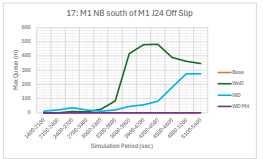


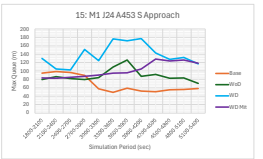


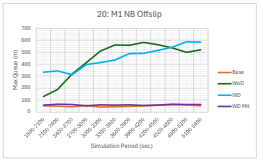


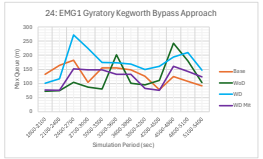


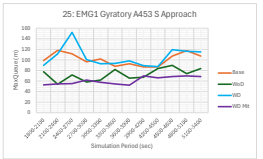


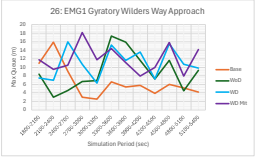


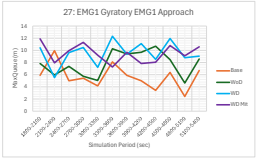


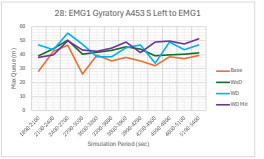


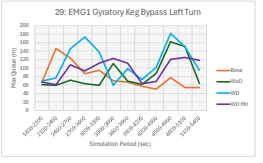


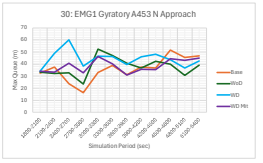


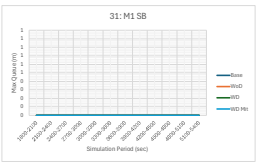


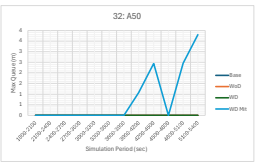




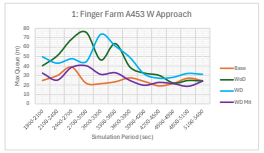


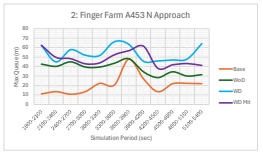


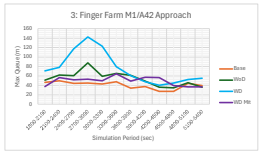


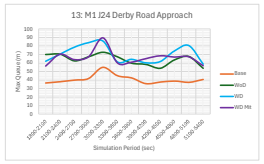


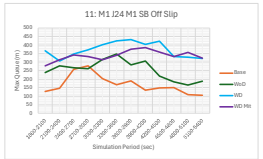
Stage 1/2B 2038 Morning Peak Hour Graphs

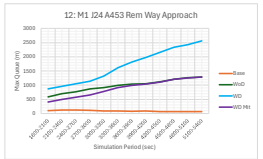


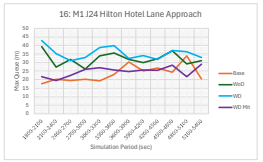


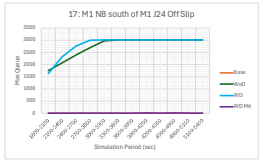


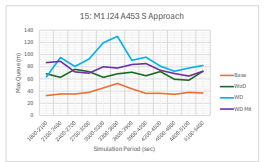


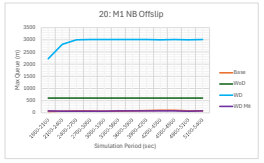


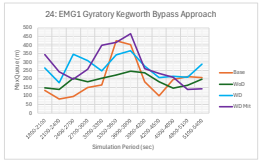


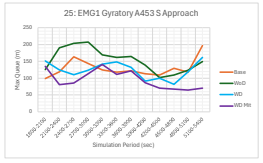


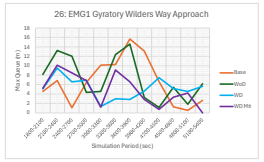


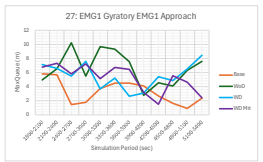


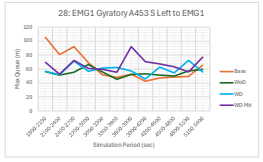


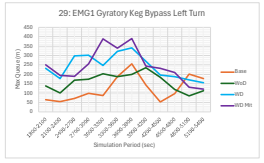


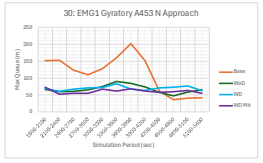


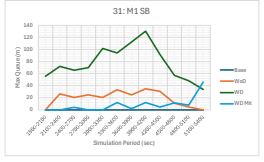


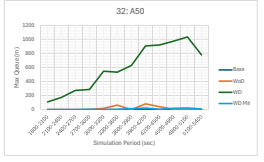




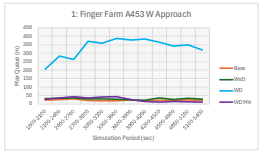


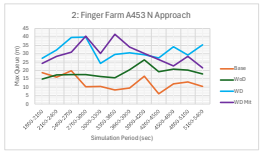


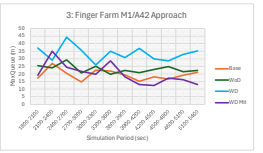


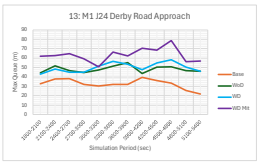


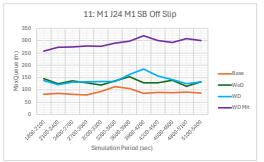
Stage 1/2B 2038 Evening Peak Hour Graphs

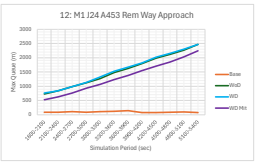


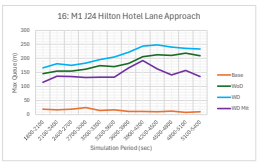


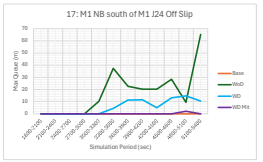


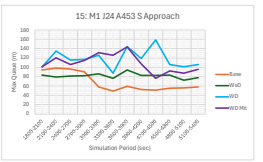


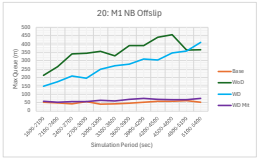


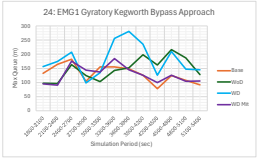


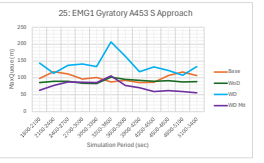


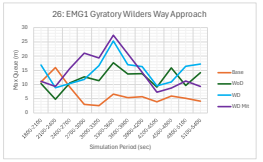


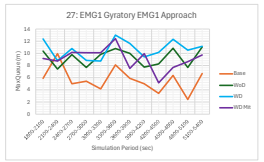


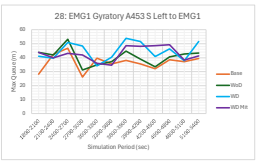


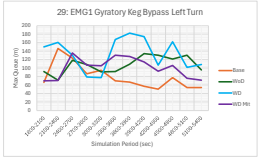


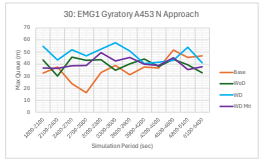


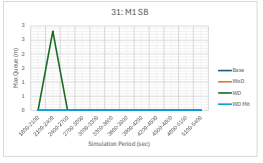


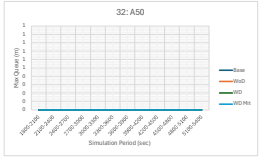




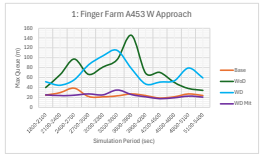


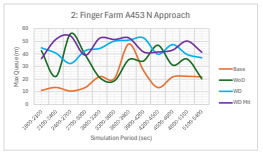


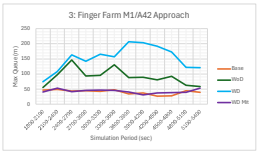


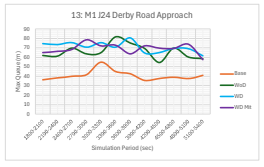


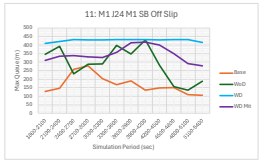
Stage 1/2B 2028 Morning Peak Hour Graphs

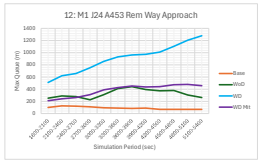


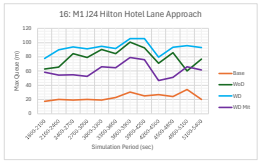


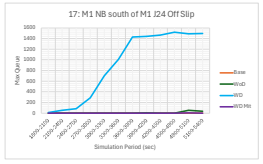


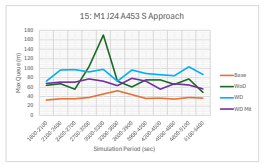


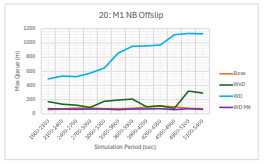


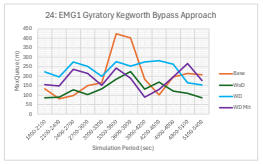


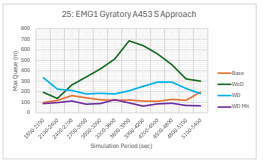


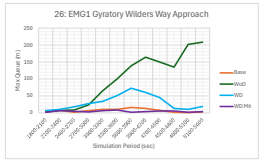


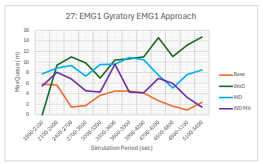


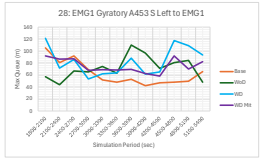


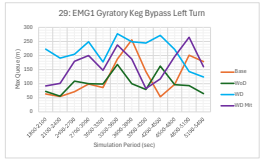


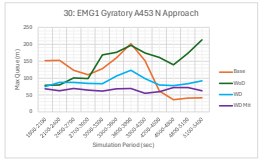


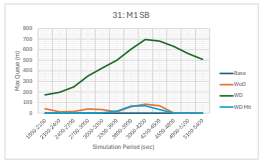


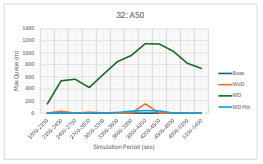




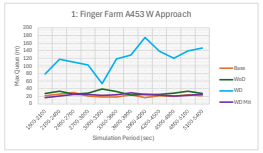


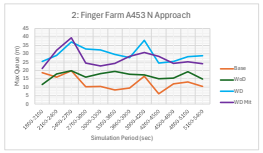


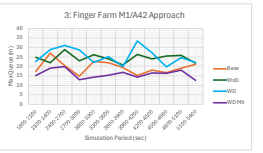


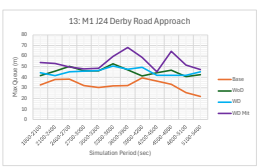


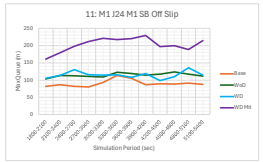
Stage 1/2B 2028 Evening Peak Hour Graphs

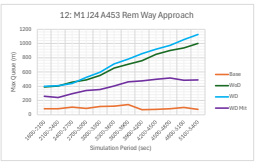


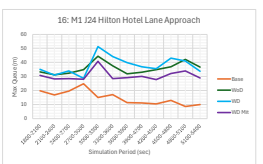


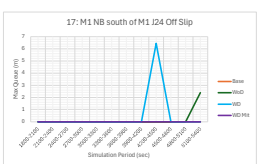


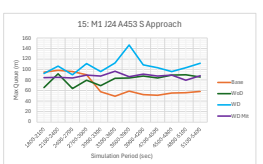


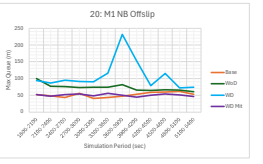


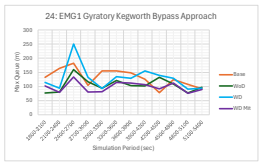


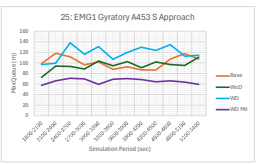


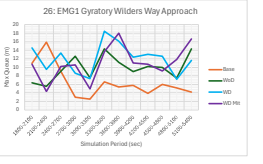


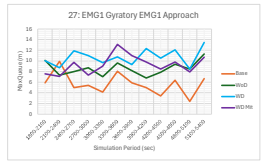


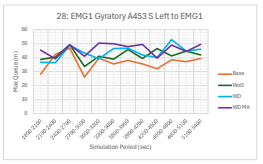


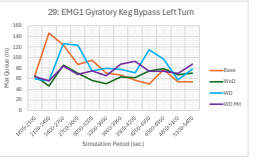


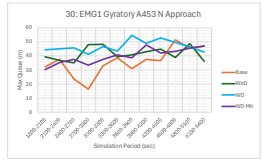


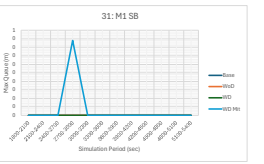


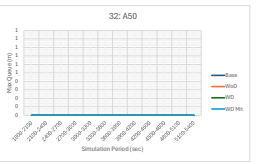












Forecast Year 2028 Stage A

Time Period	Scenarios	Delay (s)	Speed (mph)	Veh Arr	Latent Delay	Latent Demand
AM	2024 Base	52	48.6	18740	1401	1
	WoD	121	40.1	21027	2863	4
	WD	153	36.5	21598	15843	48
	WD Mit	93	43.1	21970	2926	2
	WD - WD	32	-3.6	571	12981	44
	Mit - WoD	-28	3.0	943	63	-2
PM	2024 Base	42	51	18534	2354	1
	WoD	81	45.8	21253	60070	15
	WD	100	42.4	22163	133859	44
	WD Mit	73	46.5	22288	123541	49
	WD - WD	20	-3.4	910	73789	30
	Mit - WoD	-7	0.7	1035	63471	34

Lantent Demand Stage A

				Latent Demand (Veh)								
2028	Scenario	Veh Arrived	Latent Demand	A50	M1 N	Remembrance Way	Hilton Hotel Lane	M1 S	A42 S	A453 W	Finger Farm Services	Hunters Road
AM	WoD	21027	4	4	0	0	0	0	0	0	0	0
	WD	21598	48	0	0	0	0	0	48	0	0	0
	WD Mit	21970	2	0	2	0	0	0	0	0	0	0
PM	WoD	21253	15	0	0	0	0	15	0	0	0	0
	WD	22163	44	0	0	0	0	44	0	0	0	0
	WD Mit	22288	49	0	0	0	0	49	0	0	0	0

Forecast Year 2028 Stage B

Time Period	Scenarios	Delay (s)	Speed (mph)	Veh Arr	Latent Delay	Latent Demand
AM	2024 Base	52	48.6	18740	1401	1
	WoD	81	44.6	20248	2133	1
	WD	133	38.5	21761	14652	4
	WD Mit	71	45.7	22217	2572	1
	WD - WD	52	-6.1	1513	12519	3
	Mit - WoD	-10	1.2	1969	439	0
PM	2024 Base	41	52	18541	2336	1
	WoD	72	46.9	21255	56562	11
	WD	98	42.7	22145	155640	66
	WD Mit	71	46.8	22346	126646	55
	WD - WD	26	-4.2	890	99077	55
	Mit - WoD	-1	-0.1	1091	70084	44

Lantent Demand Stage B

				Latent Demand (Veh)								
2028	Scenario	Veh Arrived	Latent Demand	A50	M1 N	Remembrance Way	Hilton Hotel Lane	M1 S	A42 S	A453 W	Finger Farm Services	Hunters Road
AM	WoD	20248	1	0	0	0	0	0	0	1	0	0
	WD	21761	4	4	0	0	0	0	0	0	0	0
	WD Mit	22217	1	0	1	0	0	0	0	0	0	0
PM	WoD	21255	11	0	0	0	0	11	0	0	0	0
	WD	22145	66	0	0	0	0	66	0	0	0	0
	WD Mit	22346	55	0	0	0	0	55	0	0	0	0

Forecast Year 2038 Stage A

Time Period	Scenarios	Delay (s)	Speed (mph)	Veh Arr	Latent Delay	Latent Demand
AM	2024 Base	52	48.6	18740	1401	1
	WoD	211	32.3	21974	108213	150
	WD	259	28.8	22360	378853	373
	WD Mit	177	34.6	22739	1003413	580
	WD - WD	48	-3.5	386	270640	223
	Mit - WoD	-34	2.4	765	895201	430
PM	2024 Base	42	51	18534	2354	1
	WoD	126	40.2	22275	748599	484
	WD	154	36.8	22872	1567205	906
	WD Mit	120	40.6	23151	980709	500
	WD - WD	28	-3.4	597	818606	422
	Mit - WoD	-7	0.4	876	232110	16

				Latent Demand (Veh)								
2038	Scenario	Veh Arrived	Latent Demand	A50	M1 N	Remembrance Way	Hilton Hotel Lane	M1 S	A42 S	A453 W	Finger Farm Services	Hunters Road
AM	WoD	21974	150	0	0	0	100	0	8	27	0	16
	WD	22360	373	168	0	0	110	0	45	0	47	4
	WD Mit	22739	580	580	0	0	0	0	0	0	0	0
PM	WoD	22275	484	0	0	180	0	304	0	0	0	0
	WD	22872	906	0	0	220	0	391	0	0	295	0
	WD Mit	23151	500	0	0	0	0	400	0	0	0	100

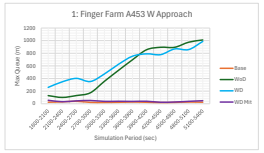
Forecast Year 2038 Stage B

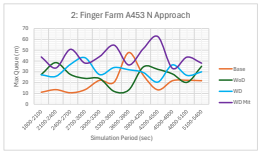
Time Period	Scenarios	Delay (s)	Speed (mph)	Veh Arr	Latent Delay	Latent Demand
AM	2024 Base	52	48.6	18740	1401	1
	WoD	164	36.0	21514	445083	502
	WD	203	32.5	21984	849994	726
	WD Mit	93	43.1	23170	4927	1
	WD - WD	38	-3.4	470	404911	225
	Mit - WoD	-71	7.1	1656	-440156	-501
PM	2024 Base	41	52	18541	2336	1
	WoD	110	42.0	22299	516565	252
	WD	132	38.8	23177	790090	382
	WD Mit	113	41.3	23109	717304	357
	WD - WD	23	-3.2	878	273525	130
	Mit - WoD	3	-0.7	810	200739	105

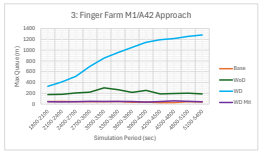
				Latent Demand (Veh)								
2038	Scenario	Veh Arrived	Latent Demand	A50	M1 N	Remembrance Way	Hilton Hotel Lane	M1 S	A42 S	A453 W	Finger Farm Services	Hunters Road
AM	WoD	21514	502	0	0	0	0	0	502	0	0	0
	WD	21984	726	0	0	0	0	0	726	0	0	0
	WD Mit	23170	1	0	0	0	0	0	1	0	0	0
PM	WoD	22299	252	0	0	0	0	252	0	0	0	0
	WD	23177	382	0	0	0	0	382	0	0	0	0
	WD Mit	23109	357	0	0	0	0	357	0	0	0	0

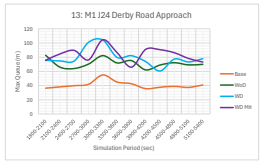
APPENDIX 4: MAXIMUM QUEUE COMPARISON GRAPHS

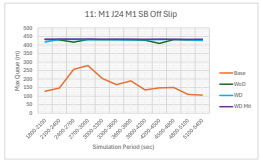
Stage 1/2A 2038 Morning Peak Hour Graphs

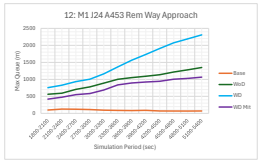


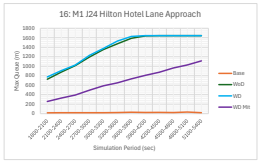


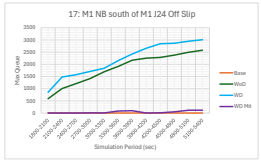


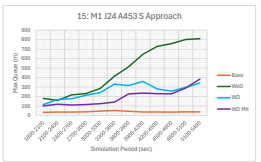


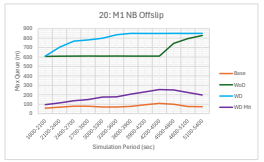


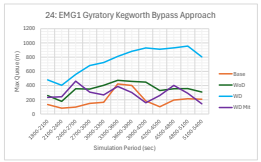


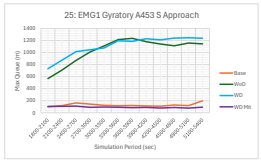


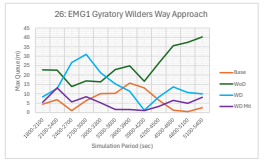


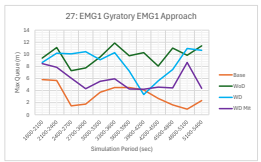


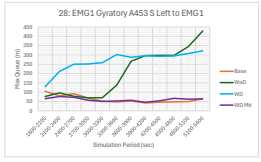


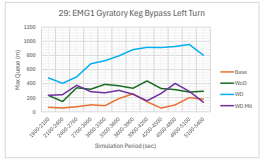


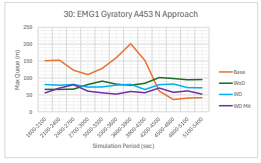


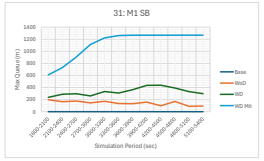


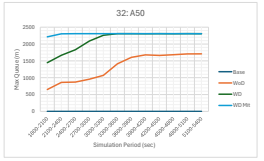




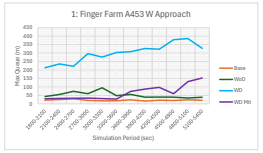


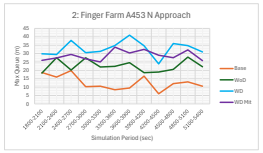


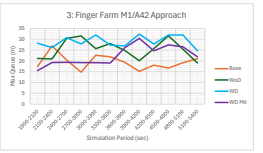


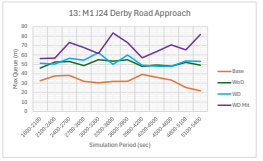


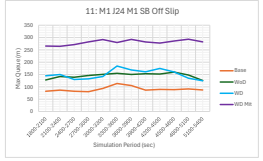
Stage 1/2A 2038 Evening Peak Hour Graphs

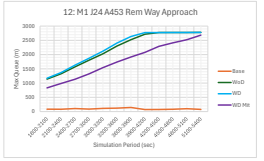


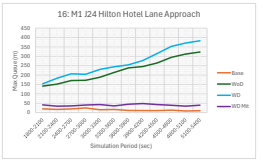


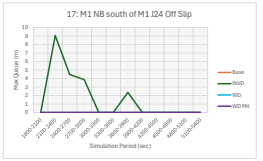


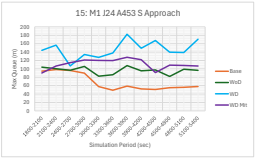


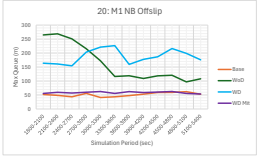


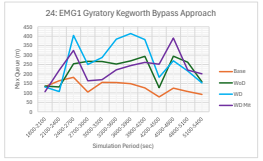


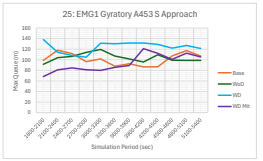


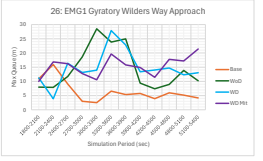


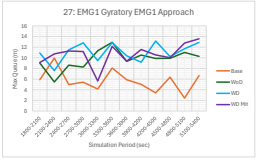


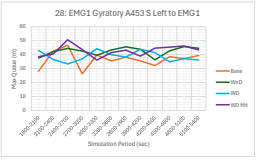


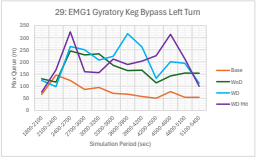


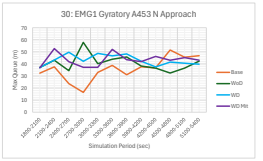


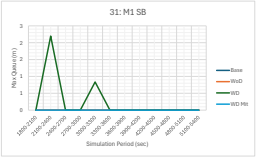


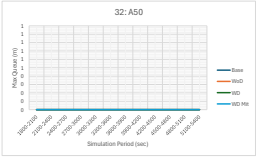




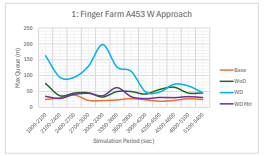


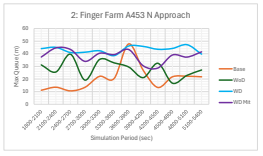


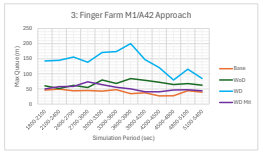


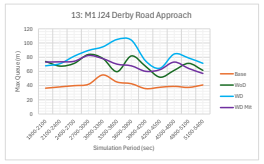


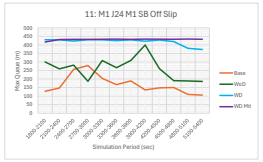
Stage 1/2A 2028 Morning Peak Hour Graphs

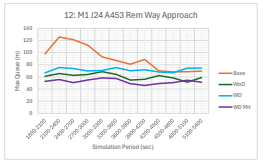


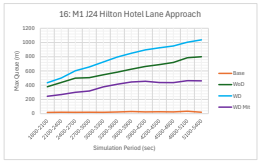


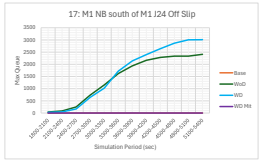


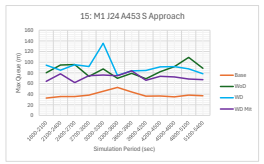


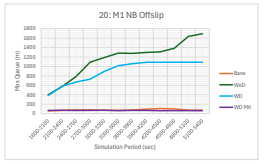


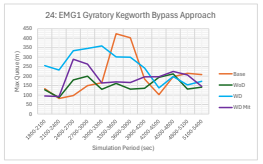


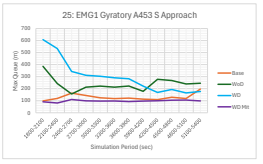


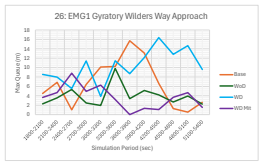


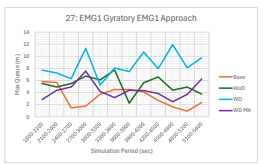


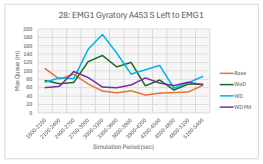


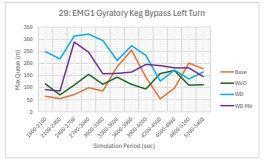


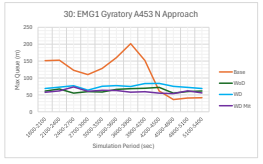


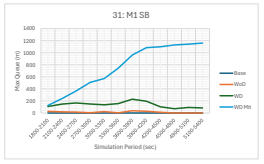


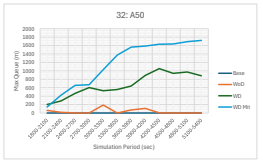




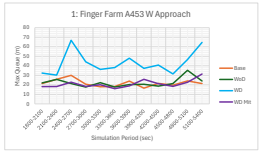


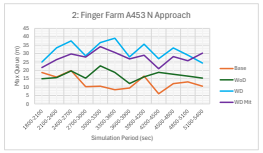


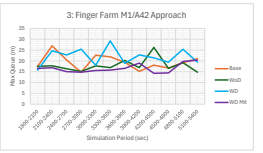


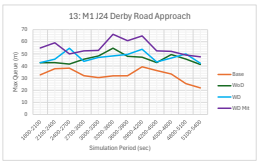


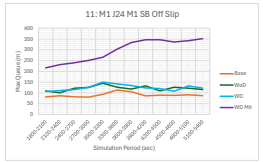
Stage 1/2A 2028 Evening Peak Hour Graphs

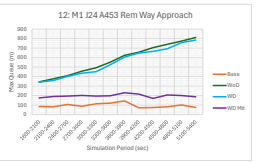


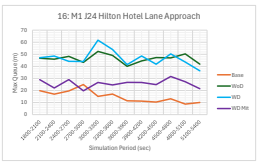


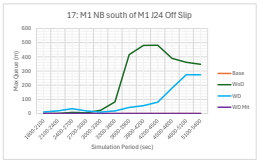


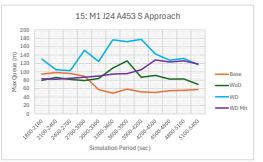


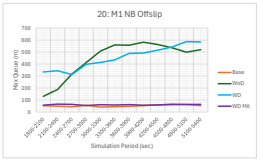


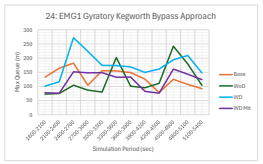


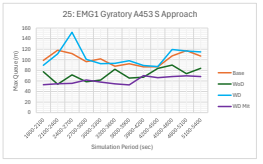


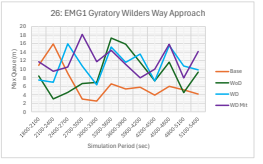


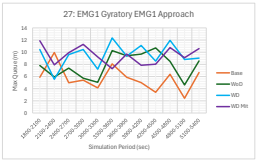


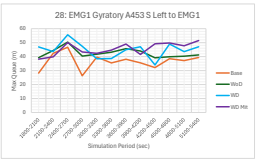


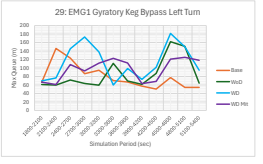


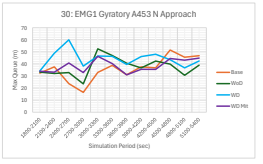


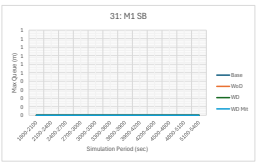


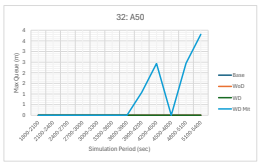




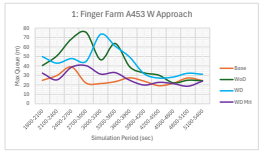


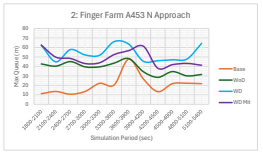


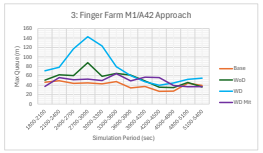


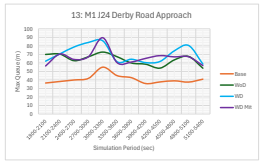


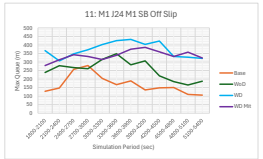
Stage 1/2B 2038 Morning Peak Hour Graphs

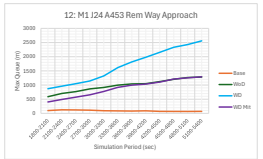


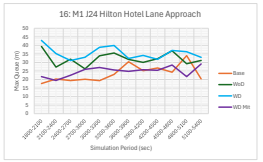


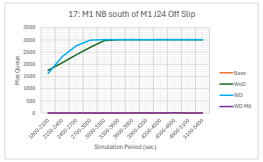


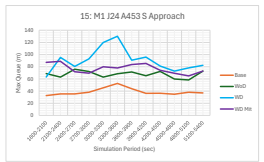


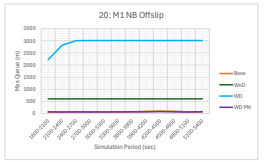


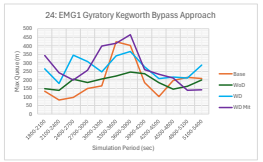


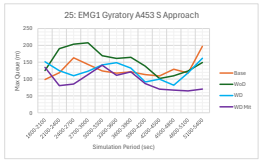


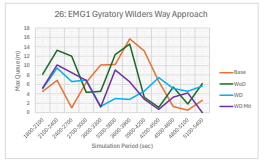


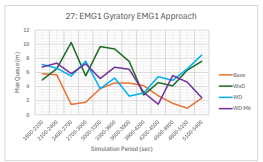


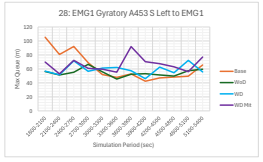


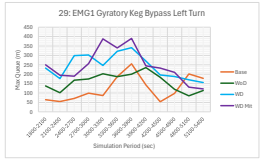


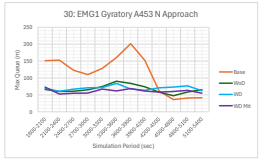


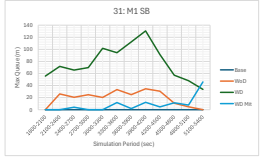


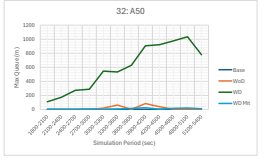




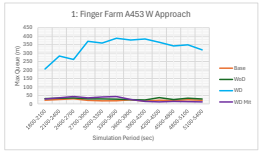


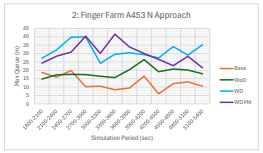


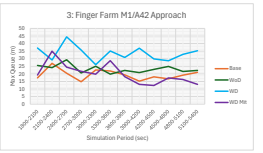


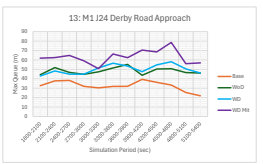


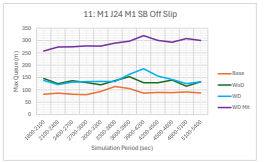
Stage 1/2B 2038 Evening Peak Hour Graphs

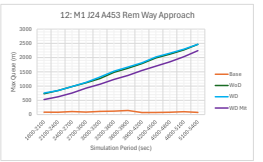


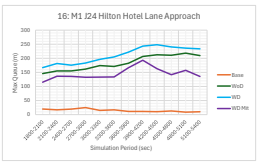


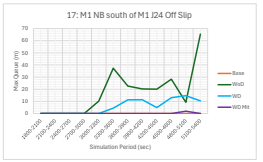


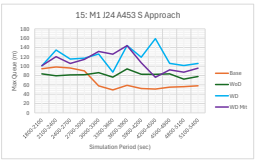


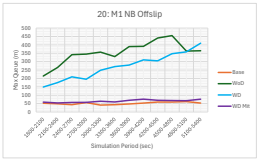


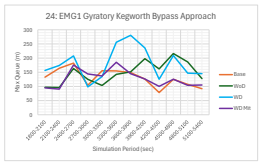


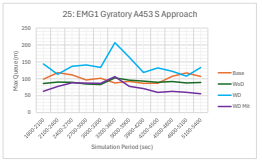


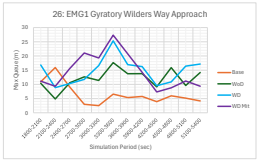


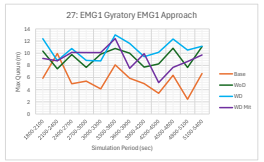


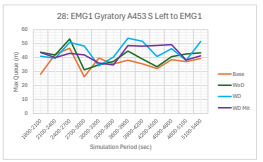


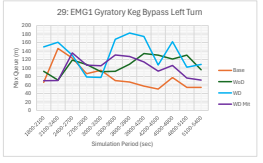


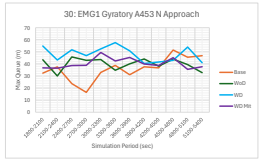


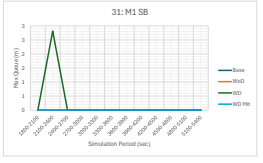


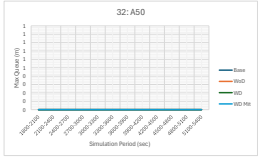




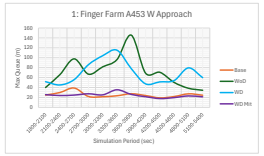


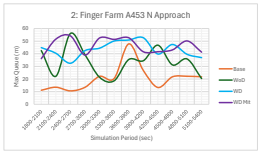


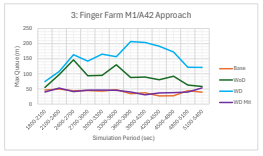


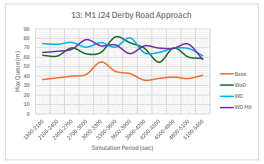


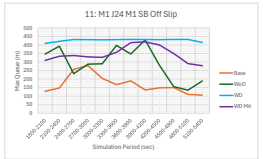
Stage 1/2B 2028 Morning Peak Hour Graphs

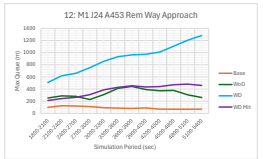


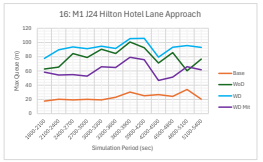


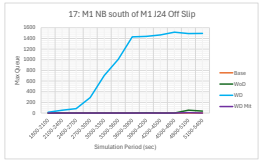


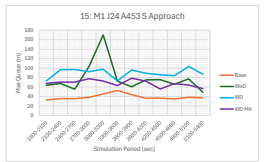


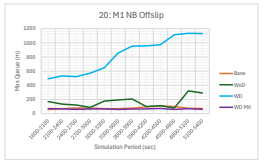


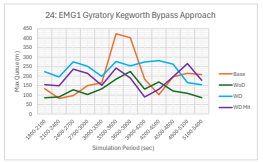


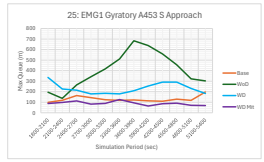


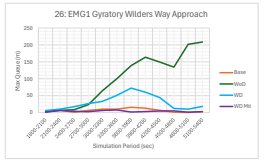


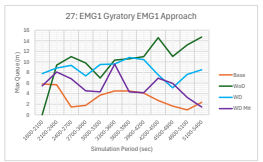


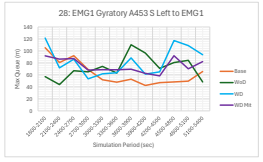


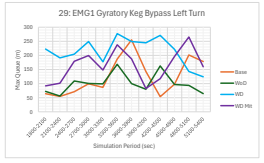


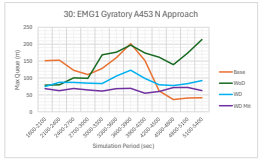


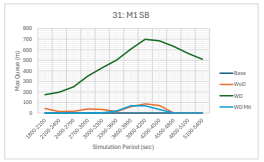


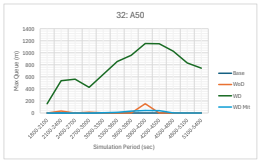




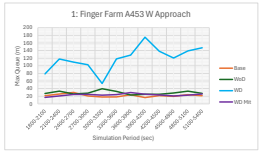


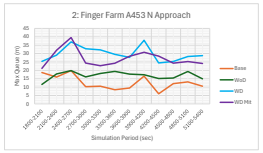


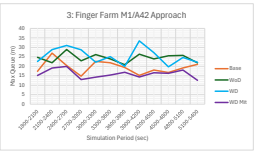


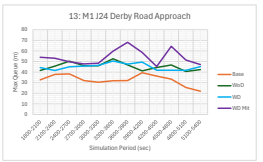


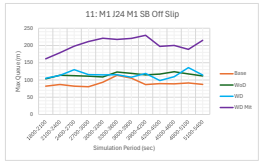
Stage 1/2B 2028 Evening Peak Hour Graphs

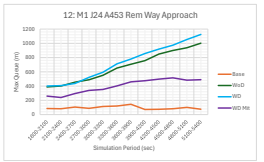


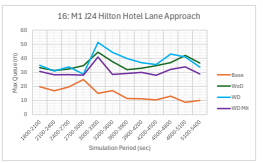


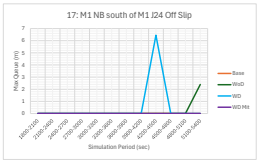


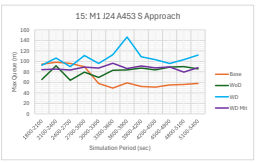


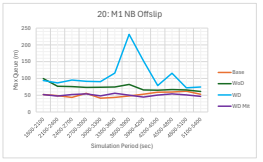


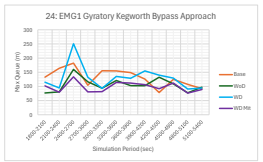


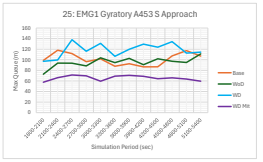


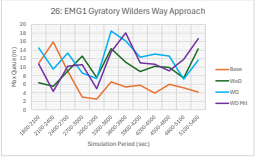


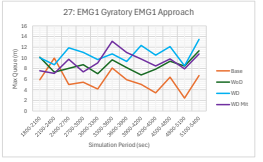


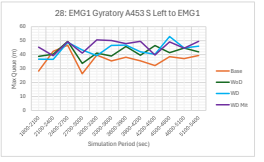


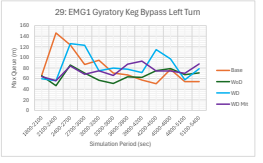


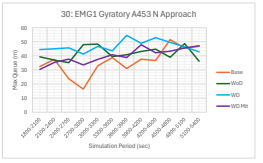


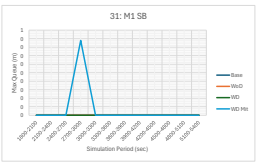


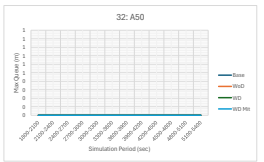












APPENDIX 5: LATENT DEMAND FIGURES

Lantent Demand Stage A

				Latent Demand (Veh)								
2028	Scenario	Veh Arrived	atent Deman	A50	M1 N	Remembra nce Way	Hilton Hotel Lane	M1 S	A42 S	A453 W	Finger Farm Services	Hunters Road
AM	WoD	21027	4	4	0	0	0	0	0	0	0	0
	WD	21598	48	0	0	0	0	0	48	0	0	0
	WD Mit	21970	2	0	2	0	0	0	0	0	0	0
PM	WoD	21253	15	0	0	0	0	15	0	0	0	0
	WD	22163	44	0	0	0	0	44	0	0	0	0
	WD Mit	22288	49	0	0	0	0	49	0	0	0	0

				Latent Demand (Veh)								
2038	Scenario	Veh Arrived	atent Deman	A50	M1 N	Remembra nce Way	Hilton Hotel Lane	M1 S	A42 S	A453 W	Finger Farm Services	Hunters Road
AM	WoD	21974	150	0	0	0	100	0	8	27	0	16
	WD	22360	373	168	0	0	110	0	45	0	47	4
	WD Mit	22739	580	580	0	0	0	0	0	0	0	0
PM	WoD	22275	484	0	0	180	0	304	0	0	0	0
	WD	22872	906	0	0	220	0	391	0	0	295	0
	WD Mit	23151	500	0	0	0	0	400	0	0	0	100

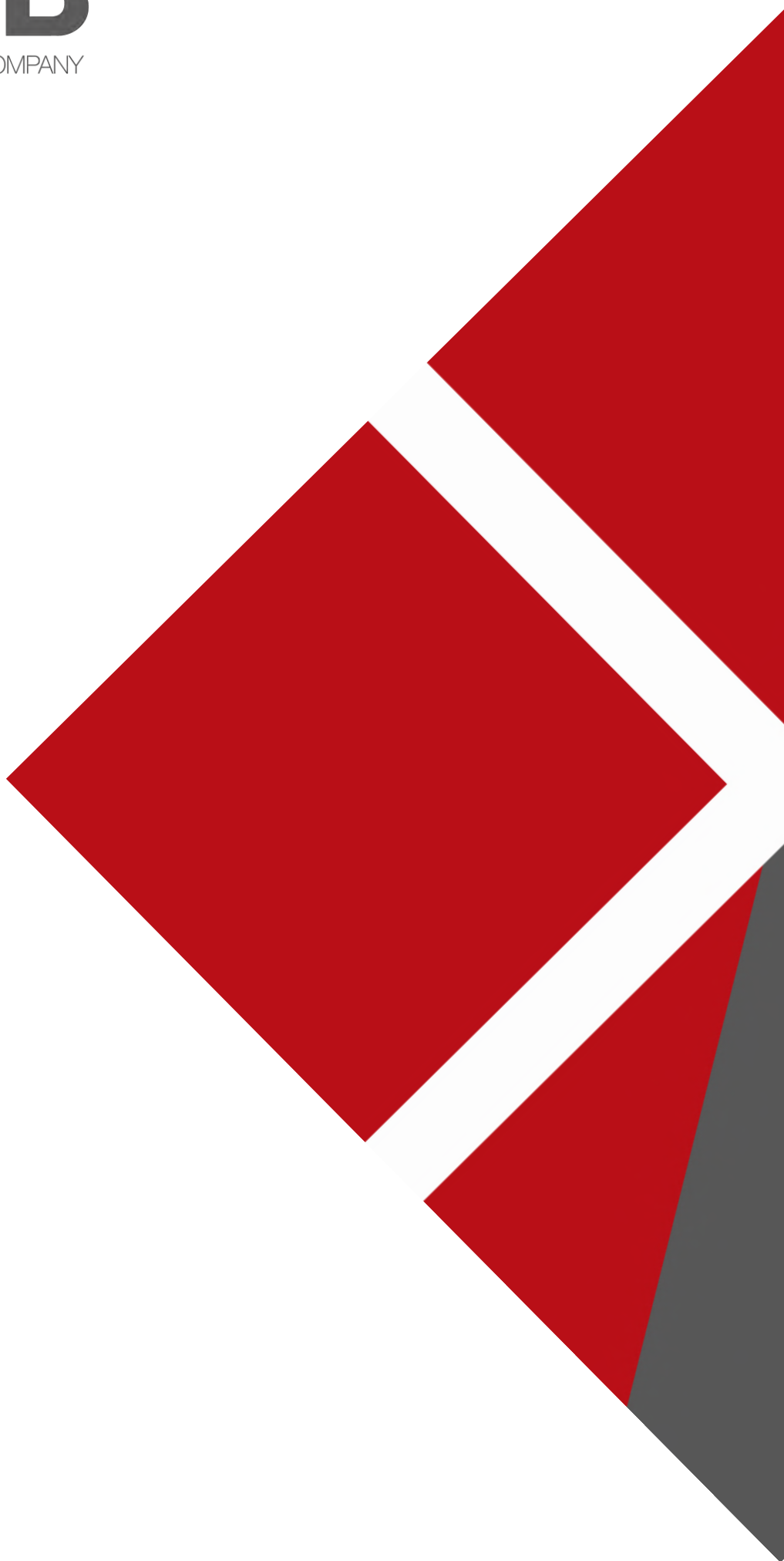
Lantent Demand Stage B

				Latent Demand (Veh)								
2028	Scenario	Veh Arrived	Latent Demand	A50	M1 N	Remembrance Way	Hilton Hotel Lane	M1 S	A42 S	A453 W	Finger Farm Services	Hunters Road
AM	WoD	20248	1	0	0	0	0	0	0	1	0	0
	WD	21761	4	4	0	0	0	0	0	0	0	0
	WD Mit	22217	1	0	1	0	0	0	0	0	0	0
PM	WoD	21255	11	0	0	0	0	11	0	0	0	0
	WD	22145	66	0	0	0	0	66	0	0	0	0
	WD Mit	22346	55	0	0	0	0	55	0	0	0	0

				Latent Demand (Veh)								
2038	Scenario	Veh Arrived	Latent Demand	A50	M1 N	Remembrance Way	Hilton Hotel Lane	M1 S	A42 S	A453 W	Finger Farm Services	Hunters Road
AM	WoD	21514	502	0	0	0	0	0	502	0	0	0
	WD	21984	726	0	0	0	0	0	726	0	0	0
	WD Mit	23170	1	0	0	0	0	0	1	0	0	0
PM	WoD	22299	252	0	0	0	0	252	0	0	0	0
	WD	23177	382	0	0	0	0	382	0	0	0	0
	WD Mit	23109	357	0	0	0	0	357	0	0	0	0

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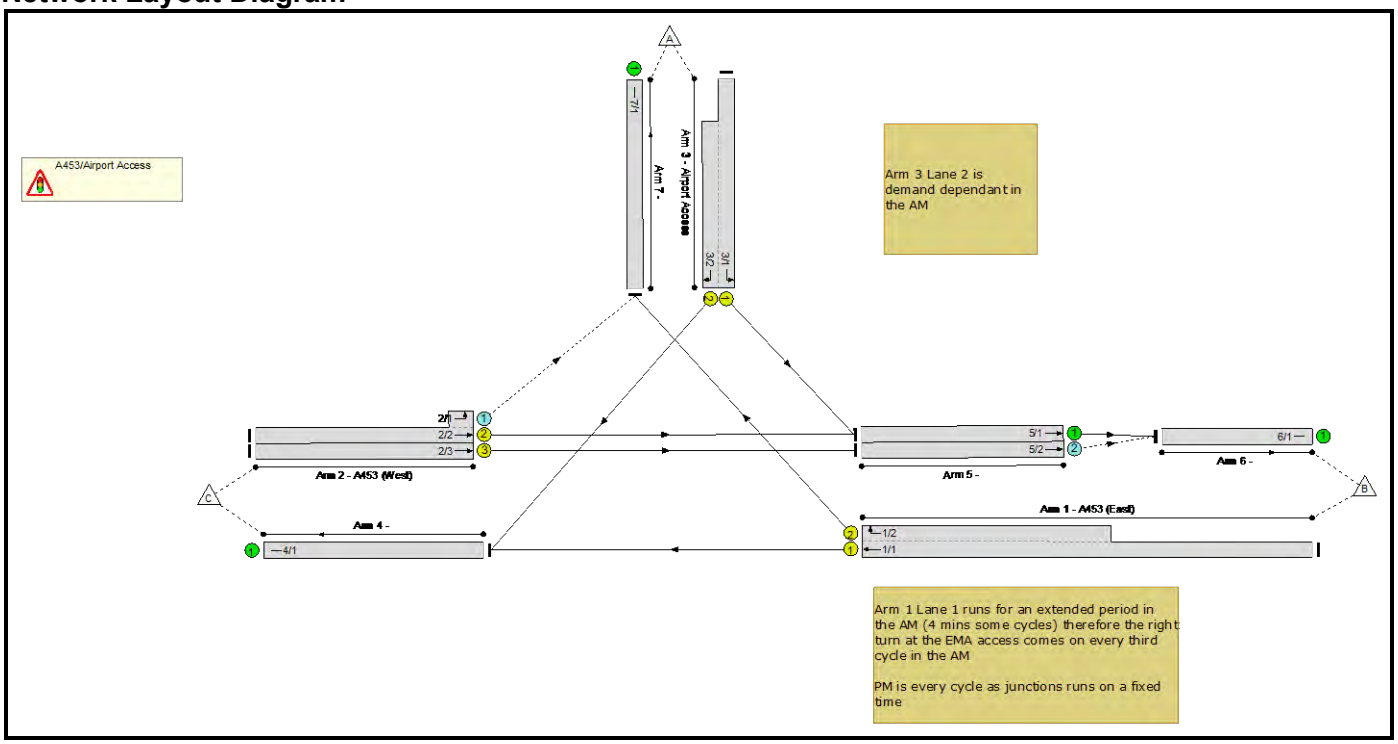
APPENDIX 51: Junction 6: A453/East Midlands Airport Signal Controlled Junction Stage 1A/2A Modelling Results

Full Input Data And Results

User and Project Details

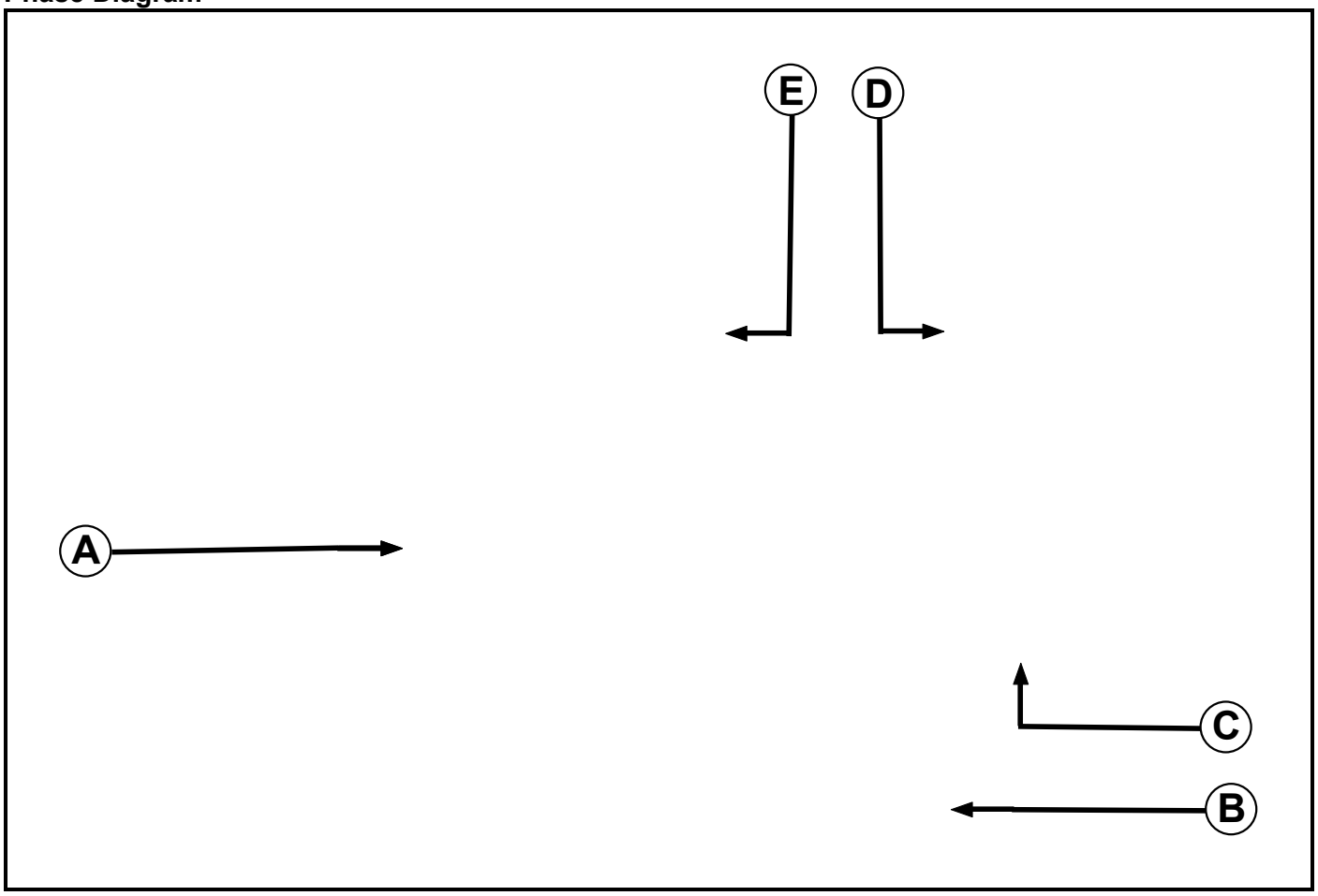
Project:	**East Midlands Gateway Phase 2**
Title:	**A453/EMA Junction**
Location:	
Client:	SEGRO
Site Ref(s):	Junction 6
Checked By:	[redacted]
Checked By Date:	27/03/24
Additional detail:	
File name:	250619_A453_Airport Access Signal Junction_Stage 1a+2a.lsg3x
Author:	[redacted]
Company:	BWB
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		6	6
C	Traffic		7	7
D	Traffic		6	6
E	Traffic		7	7

Full Input Data And Results

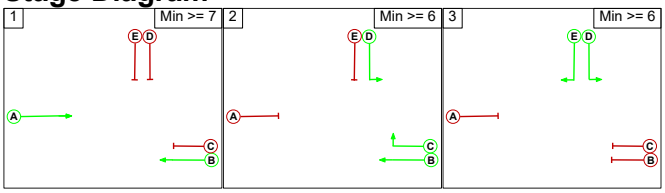
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
		A	B	C	D	E
	A		-	6	7	6
	B	-		-	-	5
	C	7	-		-	6
	D	5	-	-		-
	E	6	6	6	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	B C D
3	D E

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage			
		1	2	3
	1		7	7
	2	7		6
	3	6	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A453/Airport Access											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
2/1 (A453 (West))	7/1 (Left)	715	0	1/2	0.22	All	-	-	-	-	-
5/2	6/1 (Ahead)	715	0	5/1	0.22	All	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: A453/Airport Access

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (A453 (East))	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Ahead	Inf
1/2 (A453 (East))	U	C	2	3	23.5	Geom	-	3.50	0.00	Y	Arm 7 Right	25.00
2/1 (A453 (West))	O		2	3	2.3	User	1439	-	-	-	-	-
2/2 (A453 (West))	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	Inf
2/3 (A453 (West))	U	A	2	3	13.0	Geom	-	3.50	0.00	N	Arm 5 Ahead	Inf
3/1 (Airport Access)	U	D	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Left	20.00
3/2 (Airport Access)	U	E	2	3	15.7	Geom	-	3.25	0.00	Y	Arm 4 Right	25.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	9.6	Geom	-	3.50	0.00	Y	Arm 6 Ahead	Inf
5/2	O		2	3	9.6	Geom	-	3.50	0.00	N	Arm 6 Ahead	Inf
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 Observed (AM)'	07:45	08:45	01:00	
2: '2022 Observed (PM)'	17:00	18:00	01:00	
3: '1a 2028 Forecast Year Without Development (AM)'	07:45	08:45	01:00	
4: '1a 2028 Forecast Year Without Development (PM)'	17:00	18:00	01:00	
5: '1a 2028 Forecast Year With Development (AM)'	07:45	08:45	01:00	
6: '1a 2028 Forecast Year With Development (PM)'	17:00	18:00	01:00	
7: '1a 2038 Forecast Year Without Development (AM)'	07:45	08:45	01:00	
8: '1a 2038 Forecast Year Without Development (PM)'	17:00	18:00	01:00	
9: '1a 2038 Forecast Year With Development (AM)'	07:45	08:45	01:00	
10: '1a 2038 Forecast Year With Development (PM)'	17:00	18:00	01:00	
11: '2a 2028 Forecast Year With Development (AM)'	07:45	08:45	01:00	
12: '2a 2028 Forecast Year With Development (PM)'	17:00	18:00	01:00	
13: '2a 2038 Forecast Year With Development (AM)'	07:45	08:45	01:00	
14: '2a 2038 Forecast Year With Development (PM)'	17:00	18:00	01:00	

Scenario 1: '2022 Observed (AM)' (FG1: '2022 Observed (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	114	39	153
	B	241	0	390	631
	C	129	460	0	589
	Tot.	370	574	429	1373

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2022 Observed (AM)
Junction: A453/Airport Access	
1/1 (with short)	631(In) 390(Out)
1/2 (short)	241
2/1 (short)	129
2/2 (with short)	476(In) 347(Out)
2/3	113
3/1 (with short)	153(In) 114(Out)
3/2 (short)	39
4/1	429
5/1	461
5/2	113
6/1	574
7/1	370

Lane Saturation Flows

Junction: A453/Airport Access

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2022 Observed (PM)' (FG2: '2022 Observed (PM)', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	224	65	289
	B	133	0	443	576
	C	41	347	0	388
	Tot.	174	571	508	1253

Traffic Lane Flows

Lane	Scenario 2: 2022 Observed (PM)
Junction: A453/Airport Access	
1/1 (with short)	576(In) 443(Out)
1/2 (short)	133
2/1 (short)	41
2/2 (with short)	314(In) 273(Out)
2/3	74
3/1 (with short)	289(In) 224(Out)
3/2 (short)	65
4/1	508
5/1	497
5/2	74
6/1	571
7/1	174

Full Input Data And Results

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '1a 2028 Forecast Year Without Development (AM)' (FG3: '1a 2028 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	167	75	242
	B	276	0	394	670
	C	252	535	0	787
	Tot.	528	702	469	1699

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 1a 2028 Forecast Year Without Development (AM)
Junction: A453/Airport Access	
1/1 (with short)	670(In) 394(Out)
1/2 (short)	276
2/1 (short)	252
2/2 (with short)	628(In) 376(Out)
2/3	159
3/1 (with short)	242(In) 167(Out)
3/2 (short)	75
4/1	469
5/1	543
5/2	159
6/1	702
7/1	528

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '1a 2028 Forecast Year Without Development (PM)' (FG4: '1a 2028 Forecast Year Without Development (PM)', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	324	143	467
	B	147	0	461	608
	C	78	426	0	504
	Tot.	225	750	604	1579

Traffic Lane Flows

Lane	Scenario 4: 1a 2028 Forecast Year Without Development (PM)
Junction: A453/Airport Access	
1/1 (with short)	608(In) 461(Out)
1/2 (short)	147
2/1 (short)	78
2/2 (with short)	402(In) 324(Out)
2/3	102
3/1 (with short)	467(In) 324(Out)
3/2 (short)	143
4/1	604
5/1	648
5/2	102
6/1	750
7/1	225

Full Input Data And Results

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: '1a 2028 Forecast Year With Development (AM)' (FG5: '1a 2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	176	83	259
	B	272	0	319	591
	C	412	645	0	1057
	Tot.	684	821	402	1907

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 1a 2028 Forecast Year With Development (AM)
Junction: A453/Airport Access	
1/1 (with short)	591(In) 319(Out)
1/2 (short)	272
2/1 (short)	412
2/2 (with short)	828(In) 416(Out)
2/3	229
3/1 (with short)	259(In) 176(Out)
3/2 (short)	83
4/1	402
5/1	592
5/2	229
6/1	821
7/1	684

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '1a 2028 Forecast Year With Development (PM)' (FG6: '1a 2028 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	286	204	490
	B	134	0	569	703
	C	82	397	0	479
	Tot.	216	683	773	1672

Traffic Lane Flows

Lane	Scenario 6: 1a 2028 Forecast Year With Development (PM)
Junction: A453/Airport Access	
1/1 (with short)	703(In) 569(Out)
1/2 (short)	134
2/1 (short)	82
2/2 (with short)	379(In) 297(Out)
2/3	100
3/1 (with short)	490(In) 286(Out)
3/2 (short)	204
4/1	773
5/1	583
5/2	100
6/1	683
7/1	216

Full Input Data And Results

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 7: '1a 2038 Forecast Year Without Development (AM)' (FG7: '1a 2038 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	170	161	331
	B	295	0	426	721
	C	369	484	0	853
	Tot.	664	654	587	1905

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 1a 2038 Forecast Year Without Development (AM)
Junction: A453/Airport Access	
1/1 (with short)	721(In) 426(Out)
1/2 (short)	295
2/1 (short)	369
2/2 (with short)	663(In) 294(Out)
2/3	190
3/1 (with short)	331(In) 170(Out)
3/2 (short)	161
4/1	587
5/1	464
5/2	190
6/1	654
7/1	664

Lane Saturation Flows

Junction: A453/Airport Access

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 8: '1a 2038 Forecast Year Without Development (PM)' (FG8: '1a 2038 Forecast Year Without Development (PM)', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	388	215	603
	B	152	0	486	638
	C	126	588	0	714
	Tot.	278	976	701	1955

Traffic Lane Flows

Lane	Scenario 8: 1a 2038 Forecast Year Without Development (PM)
Junction: A453/Airport Access	
1/1 (with short)	638(In) 486(Out)
1/2 (short)	152
2/1 (short)	126
2/2 (with short)	566(In) 440(Out)
2/3	148
3/1 (with short)	603(In) 388(Out)
3/2 (short)	215
4/1	701
5/1	828
5/2	148
6/1	976
7/1	278

Full Input Data And Results

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 9: '1a 2038 Forecast Year With Development (AM)' (FG9: '1a 2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	169	165	334
	B	278	0	331	609
	C	544	566	0	1110
	Tot.	822	735	496	2053

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 1a 2038 Forecast Year With Development (AM)
Junction: A453/Airport Access	
1/1 (with short)	609(In) 331(Out)
1/2 (short)	278
2/1 (short)	544
2/2 (with short)	759(In) 215(Out)
2/3	351
3/1 (with short)	334(In) 169(Out)
3/2 (short)	165
4/1	496
5/1	384
5/2	351
6/1	735
7/1	822

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 10: '1a 2038 Forecast Year With Development (PM)' (FG10: '1a 2038 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	365	320	685
	B	169	0	651	820
	C	134	476	0	610
	Tot.	303	841	971	2115

Traffic Lane Flows

Lane	Scenario 10: 1a 2038 Forecast Year With Development (PM)
Junction: A453/Airport Access	
1/1 (with short)	820(In) 651(Out)
1/2 (short)	169
2/1 (short)	134
2/2 (with short)	469(In) 335(Out)
2/3	141
3/1 (with short)	685(In) 365(Out)
3/2 (short)	320
4/1	971
5/1	700
5/2	141
6/1	841
7/1	303

Full Input Data And Results

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 11: '2a 2028 Forecast Year With Development (AM)' (FG11: '2a 2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	178	68	246
	B	267	0	361	628
	C	291	691	0	982
	Tot.	558	869	429	1856

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 11: 2a 2028 Forecast Year With Development (AM)
Junction: A453/Airport Access	
1/1 (with short)	628(In) 361(Out)
1/2 (short)	267
2/1 (short)	291
2/2 (with short)	774(In) 483(Out)
2/3	208
3/1 (with short)	246(In) 178(Out)
3/2 (short)	68
4/1	429
5/1	661
5/2	208
6/1	869
7/1	558

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 12: '2a 2028 Forecast Year With Development (PM)' (FG12: '2a 2028 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	287	224	511
	B	122	0	573	695
	C	82	413	0	495
	Tot.	204	700	797	1701

Traffic Lane Flows

Lane	Scenario 12: 2a 2028 Forecast Year With Development (PM)
Junction: A453/Airport Access	
1/1 (with short)	695(In) 573(Out)
1/2 (short)	122
2/1 (short)	82
2/2 (with short)	385(In) 303(Out)
2/3	110
3/1 (with short)	511(In) 287(Out)
3/2 (short)	224
4/1	797
5/1	590
5/2	110
6/1	700
7/1	204

Full Input Data And Results

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 13: '2a 2038 Forecast Year With Development (AM)' (FG13: '2a 2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	209	121	330
	B	281	0	361	642
	C	374	734	0	1108
	Tot.	655	943	482	2080

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 13: 2a 2038 Forecast Year With Development (AM)
Junction: A453/Airport Access	
1/1 (with short)	642(In) 361(Out)
1/2 (short)	281
2/1 (short)	374
2/2 (with short)	865(In) 491(Out)
2/3	243
3/1 (with short)	330(In) 209(Out)
3/2 (short)	121
4/1	482
5/1	700
5/2	243
6/1	943
7/1	655

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 14: '2a 2038 Forecast Year With Development (PM)' (FG14: '2a 2038 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	365	316	681
	B	157	0	680	837
	C	117	484	0	601
	Tot.	274	849	996	2119

Traffic Lane Flows

Lane	Scenario 14: 2a 2038 Forecast Year With Development (PM)
Junction: A453/Airport Access	
1/1 (with short)	837(In) 680(Out)
1/2 (short)	157
2/1 (short)	117
2/2 (with short)	477(In) 360(Out)
2/3	124
3/1 (with short)	681(In) 365(Out)
3/2 (short)	316
4/1	996
5/1	725
5/2	124
6/1	849
7/1	274

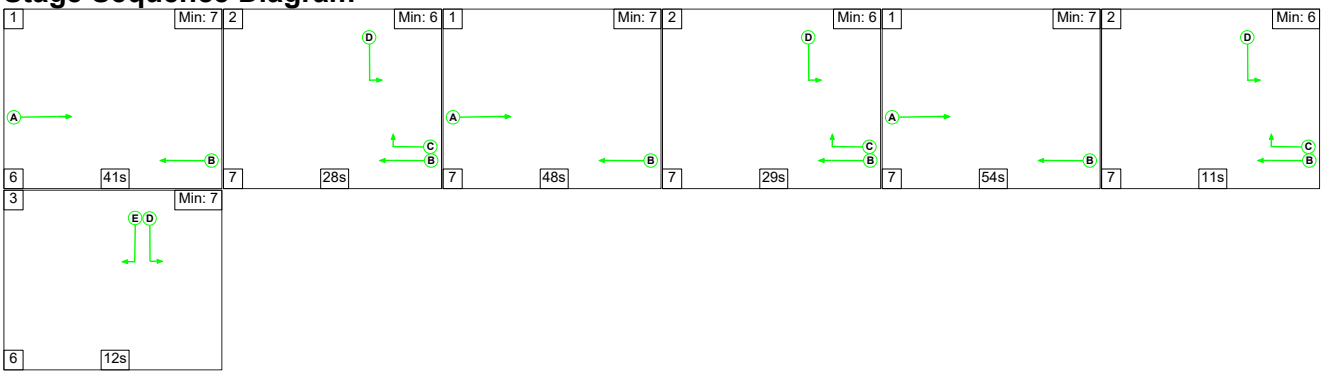
Full Input Data And Results

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2022 Observed (AM)' (FG1: '2022 Observed (AM)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

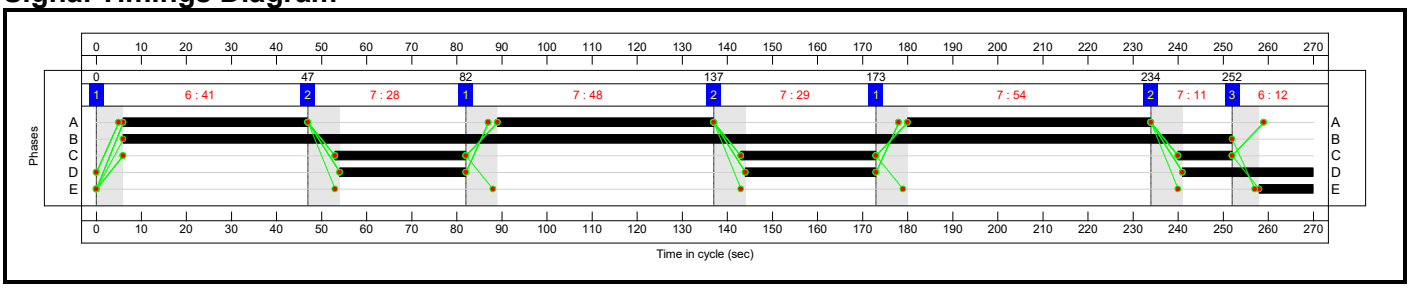


Stage Timings

Stage	1	2	1	2	1	2	3
Duration	41	28	48	29	54	11	12
Change Point	0	47	82	137	173	234	252

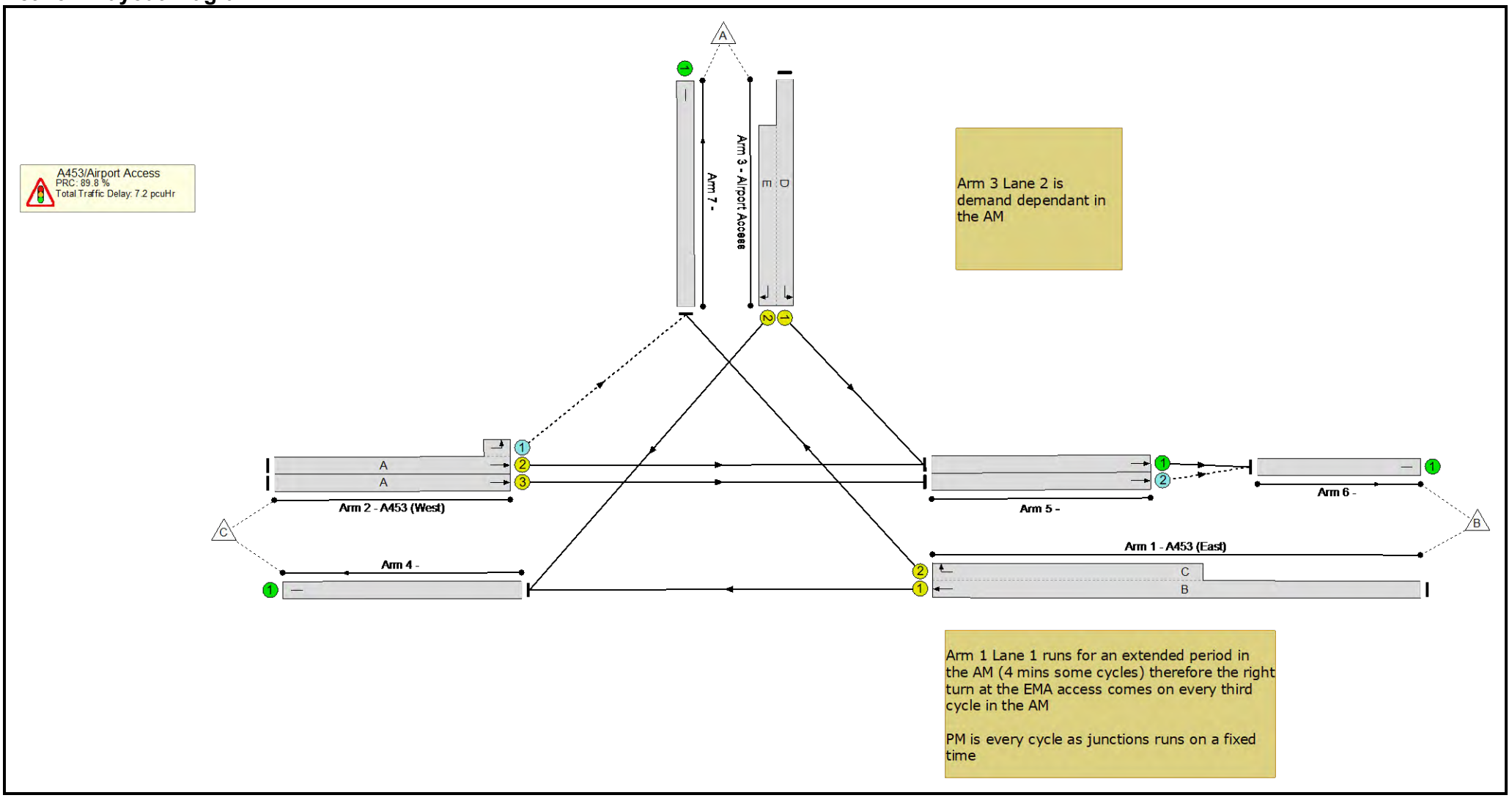
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.4%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.4%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1:3	246:71	-	631	1965:1854	822+508	47.4 : 47.4%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		3	143	-	476	1965:1439	736+273	47.2 : 47.2%
2/3	A453 (West) Ahead	U	N/A	N/A	A		3	143	-	113	2105	1138	9.9%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		3:1	86:12	-	153	1805:1830	258+88	44.3 : 44.3%
4/1		U	N/A	N/A	-		-	-	-	429	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	461	1965	1965	23.5%
5/2	Ahead	O	N/A	N/A	-		-	-	-	113	2105	614	18.4%
6/1		U	N/A	N/A	-		-	-	-	574	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	370	Inf	Inf	0.0%

Full Input Data And Results

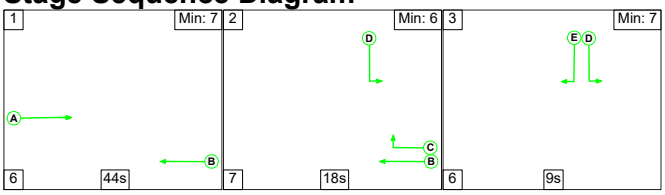
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**135**	**107**	**0**	**5.6**	**1.6**	**0.0**	**7.2**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**135**	**107**	**0**	**5.6**	**1.6**	**0.0**	**7.2**	**-**	**-**	**-**	**-**
1/1+1/2	631	631	-	-	-	2.0	0.5	-	2.4 (0.4+2.0)	13.8 (3.8:29.9)	5.4	0.5	5.8
2/2+2/1	476	476	22	107	0	1.3	0.4	-	1.7 (1.5+0.2)	13.0 (15.3:6.9)	6.4	0.4	6.8
2/3	113	113	-	-	-	0.3	0.1	-	0.4	11.8	1.4	0.1	1.4
3/1+3/2	153	153	-	-	-	2.0	0.4	-	2.4 (1.0+1.5)	57.4 (31.1:134.3)	2.8	0.4	3.2
4/1	429	429	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	461	461	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
5/2	113	113	113	0	0	0.0	0.1	-	0.1	4.7	1.6	0.1	1.7
6/1	574	574	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	370	370	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 89.8 Total Delay for Signalled Lanes (pcuHr): 6.95 Cycle Time (s): 270
PRC Over All Lanes (%): 89.8 Total Delay Over All Lanes(pcuHr): 7.25

Full Input Data And Results

Scenario 2: '2022 Observed (PM)' (FG2: '2022 Observed (PM)', Plan 2: 'Network Control Plan 2')

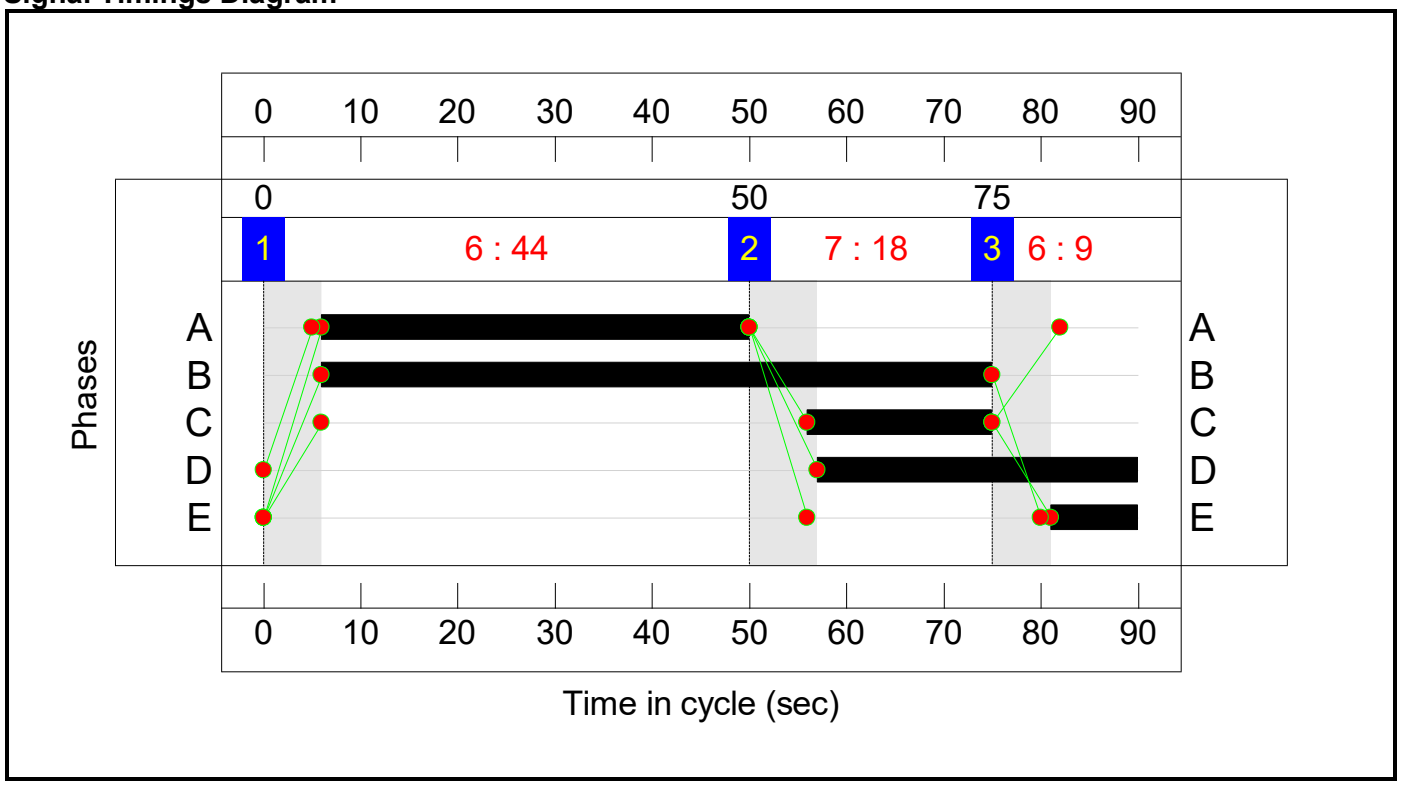
Stage Sequence Diagram



Stage Timings

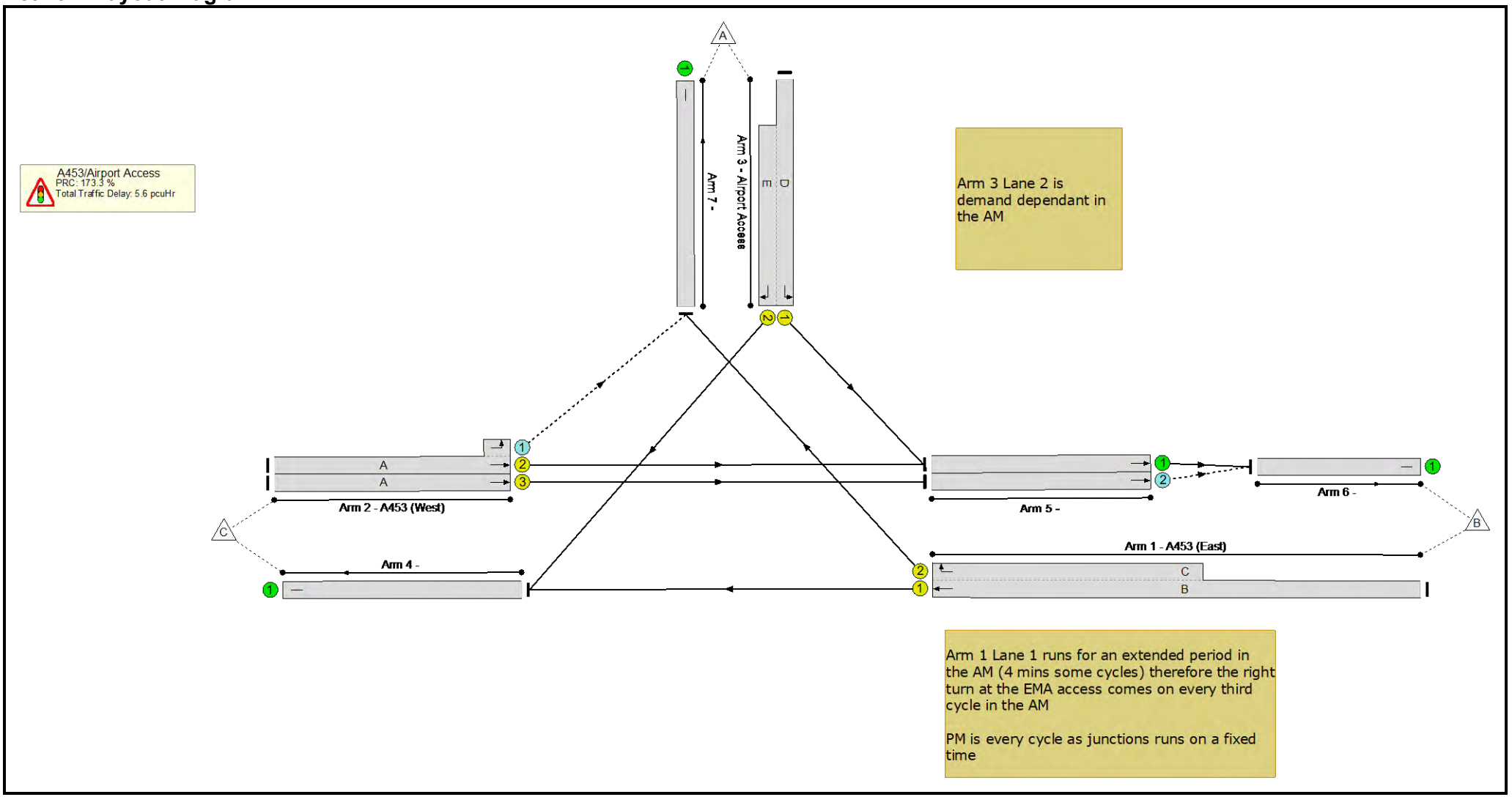
Stage	1	2	3
Duration	44	18	9
Change Point	0	50	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**32.9%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**32.9%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1	69:19	-	576	1965:1854	1397+412	31.7 : 32.3%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		1	44	-	314	1965:1439	830+125	32.9 : 32.9%
2/3	A453 (West) Ahead	U	N/A	N/A	A		1	44	-	74	2105	1052	7.0%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		1	33:9	-	289	1805:1830	680+197	32.9 : 32.9%
4/1		U	N/A	N/A	-		-	-	-	508	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	497	1965	1965	25.3%
5/2	Ahead	O	N/A	N/A	-		-	-	-	74	2105	606	12.2%
6/1		U	N/A	N/A	-		-	-	-	571	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	174	Inf	Inf	0.0%

Full Input Data And Results

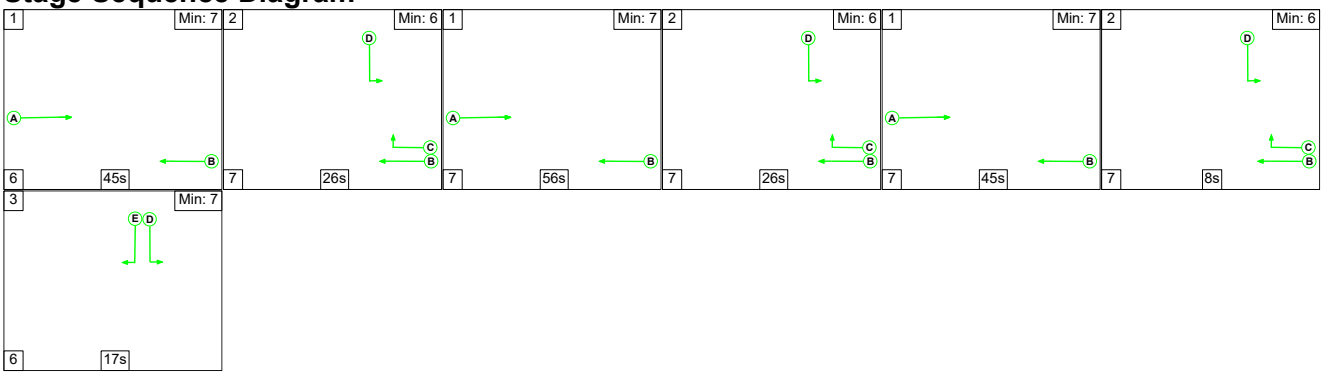
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**83**	**32**	**0**	**4.6**	**1.0**	**0.0**	**5.6**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**83**	**32**	**0**	**4.6**	**1.0**	**0.0**	**5.6**	**-**	**-**	**-**	**-**
1/1+1/2	576	576	-	-	-	1.4	0.2	-	1.7 (0.5+1.1)	10.4 (4.3:30.8)	3.1	0.2	3.3
2/2+2/1	314	314	9	32	0	1.0	0.2	-	1.3 (1.2+0.1)	14.6 (16.0:5.2)	4.3	0.2	4.6
2/3	74	74	-	-	-	0.2	0.0	-	0.3	13.5	0.9	0.0	1.0
3/1+3/2	289	289	-	-	-	1.9	0.2	-	2.1 (1.4+0.7)	26.8 (22.9:39.9)	3.9	0.2	4.2
4/1	508	508	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	497	497	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
5/2	74	74	74	0	0	0.0	0.1	-	0.1	3.6	1.0	0.1	1.1
6/1	571	571	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	174	174	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 173.3 Total Delay for Signalled Lanes (pcuHr): 5.37 Cycle Time (s): 90
PRC Over All Lanes (%): 173.3 Total Delay Over All Lanes(pcuHr): 5.61

Full Input Data And Results

Scenario 3: '1a 2028 Forecast Year Without Development (AM)' (FG3: '1a 2028 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

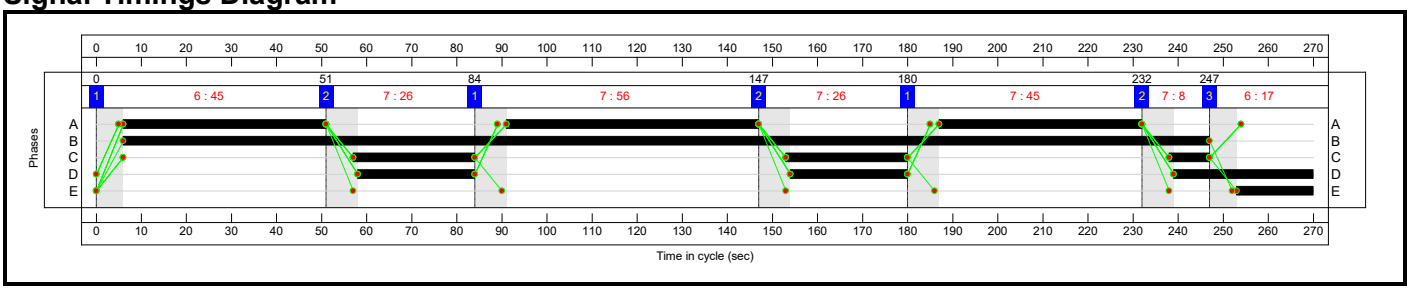
Stage Sequence Diagram



Stage Timings

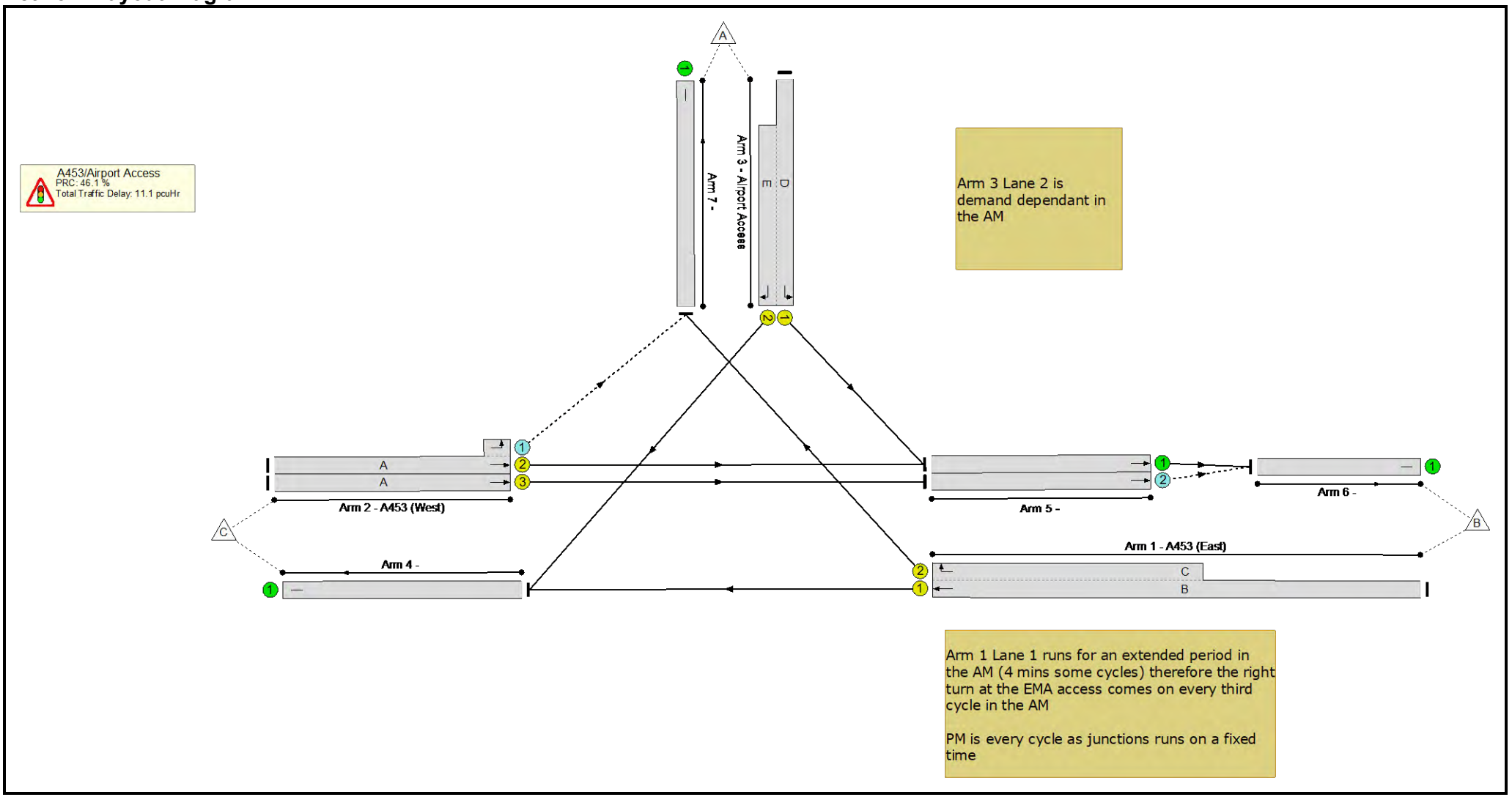
Stage	1	2	1	2	1	2	3
Duration	45	26	56	26	45	8	17
Change Point	0	51	84	147	180	232	247

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**61.6%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**61.6%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1:3	241:63	-	670	1965:1854	647+453	60.9 : 60.9%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		3	146	-	628	1965:1439	611+409	61.6 : 61.6%
2/3	A453 (West) Ahead	U	N/A	N/A	A		3	146	-	159	2105	1162	13.7%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		3:1	83:17	-	242	1805:1830	272+122	61.5 : 61.5%
4/1		U	N/A	N/A	-		-	-	-	469	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	543	1965	1965	27.6%
5/2	Ahead	O	N/A	N/A	-		-	-	-	159	2105	595	26.7%
6/1		U	N/A	N/A	-		-	-	-	702	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	528	Inf	Inf	0.0%

Full Input Data And Results

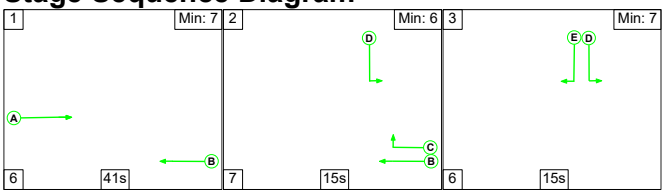
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**196**	**215**	**0**	**8.3**	**2.8**	**0.0**	**11.1**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**196**	**215**	**0**	**8.3**	**2.8**	**0.0**	**11.1**	**-**	**-**	**-**	**-**
1/1+1/2	670	670	-	-	-	2.6	0.8	-	3.3 (0.7+2.7)	17.9 (6.0:34.9)	7.1	0.8	7.8
2/2+2/1	628	628	37	215	0	1.6	0.8	-	2.4 (1.7+0.6)	13.7 (16.7:9.0)	9.3	0.8	10.1
2/3	159	159	-	-	-	0.4	0.1	-	0.5	11.6	2.0	0.1	2.1
3/1+3/2	242	242	-	-	-	3.6	0.8	-	4.4 (1.6+2.8)	65.8 (35.0:134.4)	5.5	0.8	6.2
4/1	469	469	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	543	543	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
5/2	159	159	159	0	0	0.1	0.2	-	0.3	6.5	2.7	0.2	2.8
6/1	702	702	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	528	528	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 46.1 Total Delay for Signalled Lanes (pcuHr): 10.64 Cycle Time (s): 270
PRC Over All Lanes (%): 46.1 Total Delay Over All Lanes(pcuHr): 11.12

Full Input Data And Results

Scenario 4: '1a 2028 Forecast Year Without Development (PM)' (FG4: '1a 2028 Forecast Year Without Development (PM)', Plan 2: 'Network Control Plan 2')

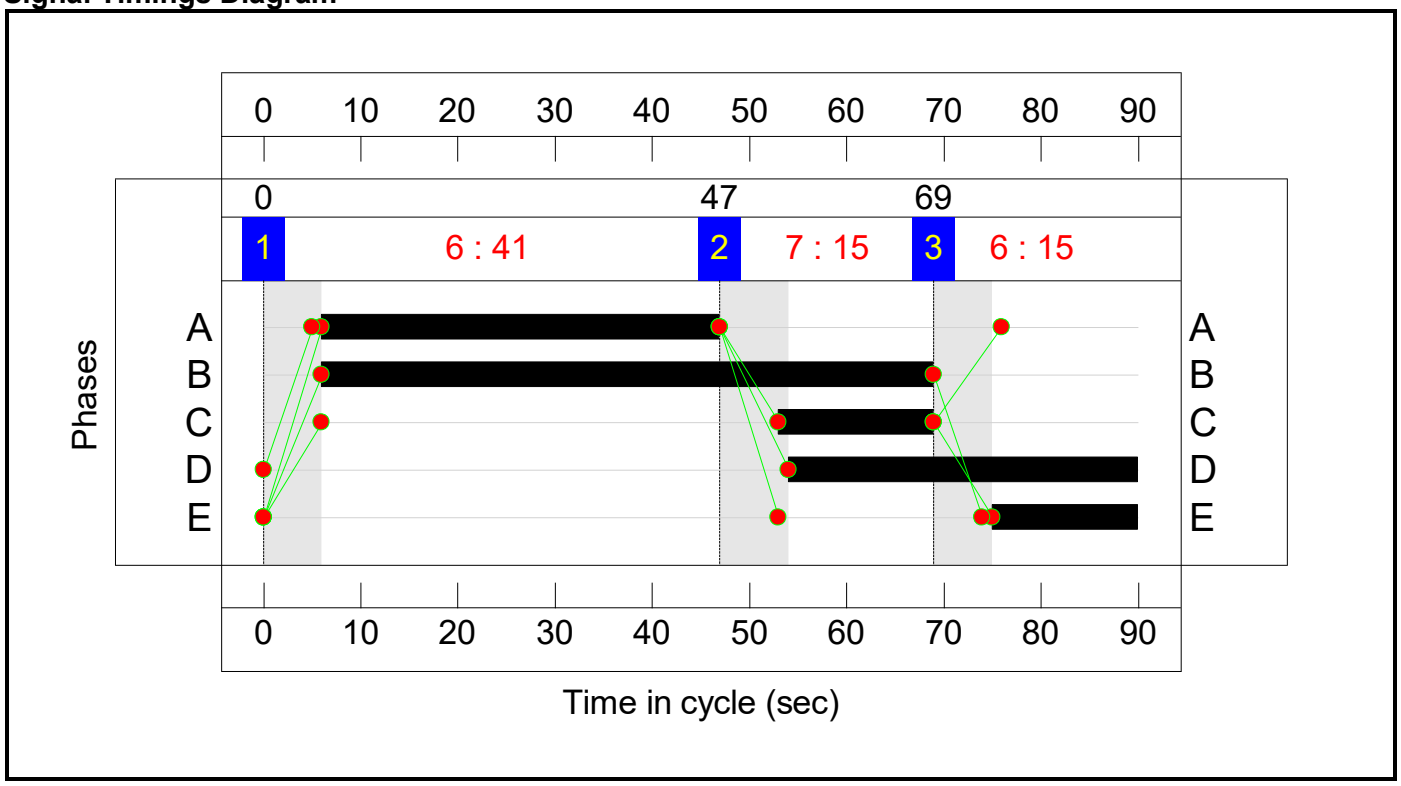
Stage Sequence Diagram



Stage Timings

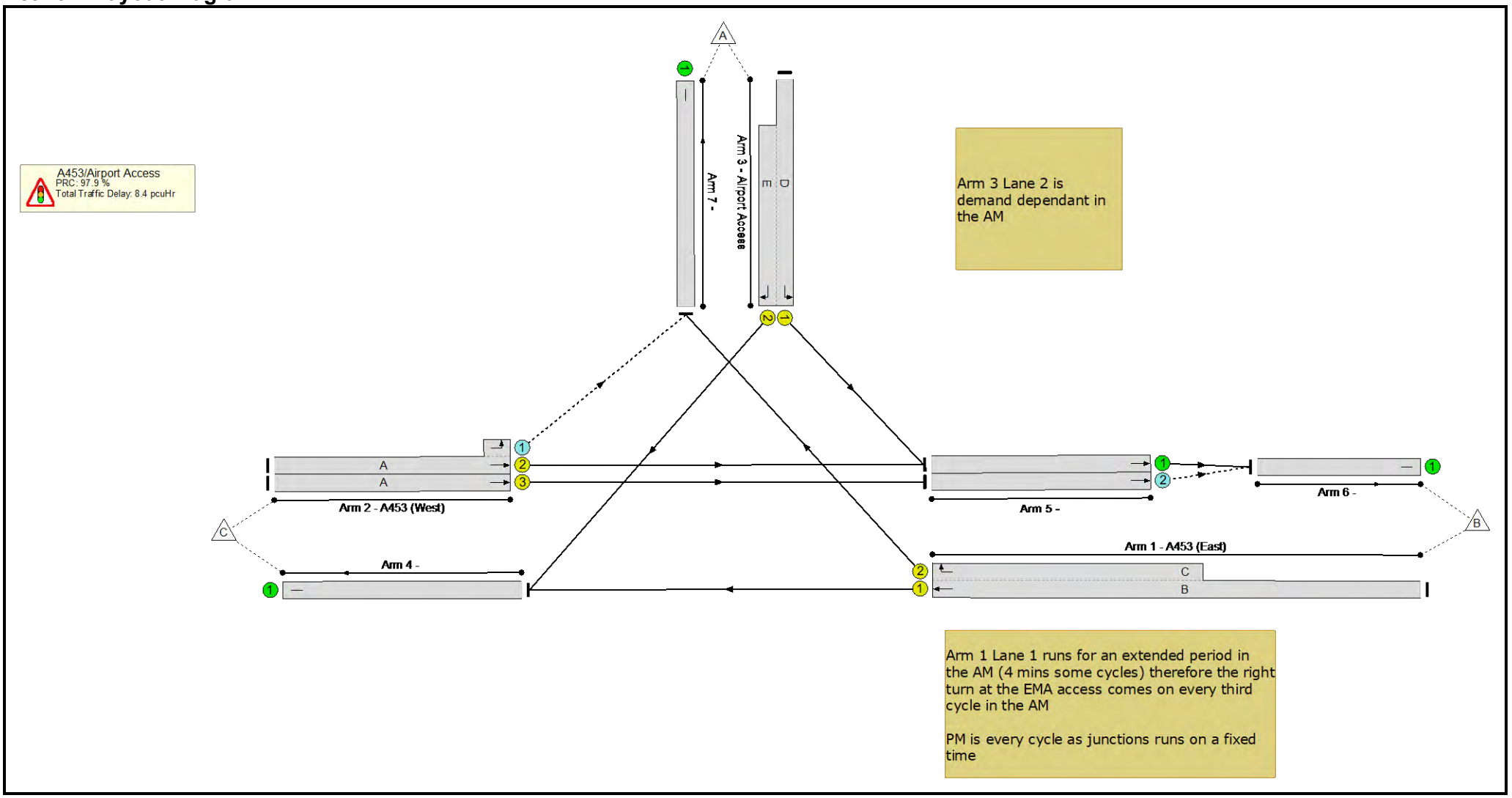
Stage	1	2	3
Duration	41	15	15
Change Point	0	47	69

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**45.5%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**45.5%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1	63:16	-	608	1965:1854	1292+350	35.7 : 42.0%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		1	41	-	402	1965:1439	712+172	45.5 : 45.5%
2/3	A453 (West) Ahead	U	N/A	N/A	A		1	41	-	102	2105	982	10.4%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		1	36:15	-	467	1805:1830	717+317	45.2 : 45.2%
4/1		U	N/A	N/A	-		-	-	-	604	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	648	1965	1965	33.0%
5/2	Ahead	O	N/A	N/A	-		-	-	-	102	2105	572	17.8%
6/1		U	N/A	N/A	-		-	-	-	750	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	225	Inf	Inf	0.0%

Full Input Data And Results

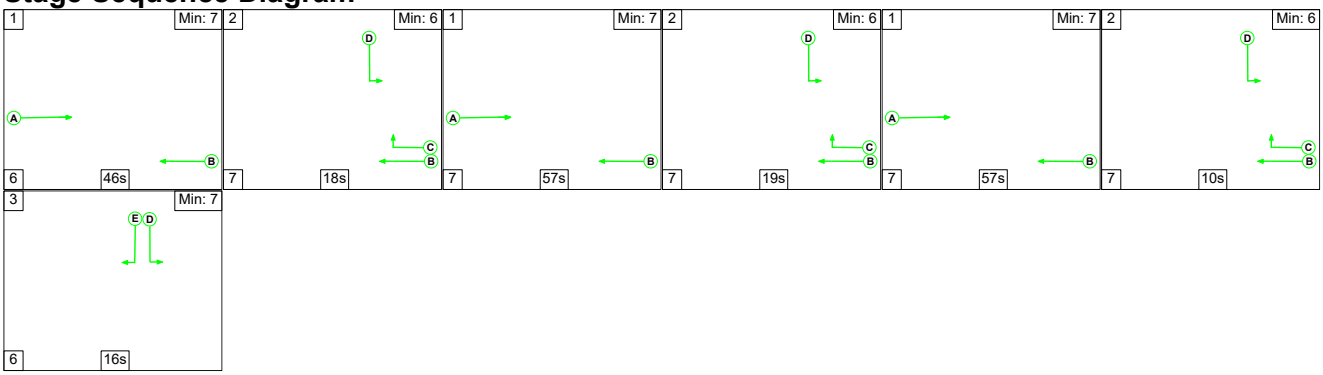
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**117**	**63**	**0**	**6.9**	**1.5**	**0.0**	**8.4**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**117**	**63**	**0**	**6.9**	**1.5**	**0.0**	**8.4**	**-**	**-**	**-**	**-**
1/1+1/2	608	608	-	-	-	1.9	0.3	-	2.2 (0.9+1.4)	13.2 (6.6:33.9)	4.2	0.3	4.5
2/2+2/1	402	402	15	63	0	1.5	0.4	-	1.9 (1.7+0.2)	17.3 (19.4:8.8)	6.1	0.4	6.5
2/3	102	102	-	-	-	0.4	0.1	-	0.4	15.5	1.4	0.1	1.5
3/1+3/2	467	467	-	-	-	3.0	0.4	-	3.4 (2.0+1.4)	26.5 (22.2:36.2)	5.8	0.4	6.2
4/1	604	604	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	648	648	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
5/2	102	102	102	0	0	0.0	0.1	-	0.1	5.3	1.7	0.1	1.8
6/1	750	750	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	225	225	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 97.9 Total Delay for Signalled Lanes (pcuHr): 8.05 Cycle Time (s): 90
PRC Over All Lanes (%): 97.9 Total Delay Over All Lanes(pcuHr): 8.44

Full Input Data And Results

Scenario 5: '1a 2028 Forecast Year With Development (AM)' (FG5: '1a 2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

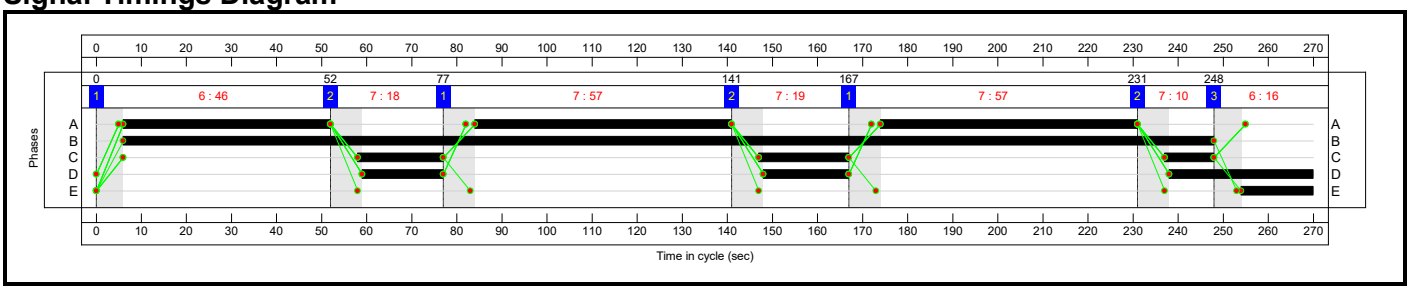
Stage Sequence Diagram



Stage Timings

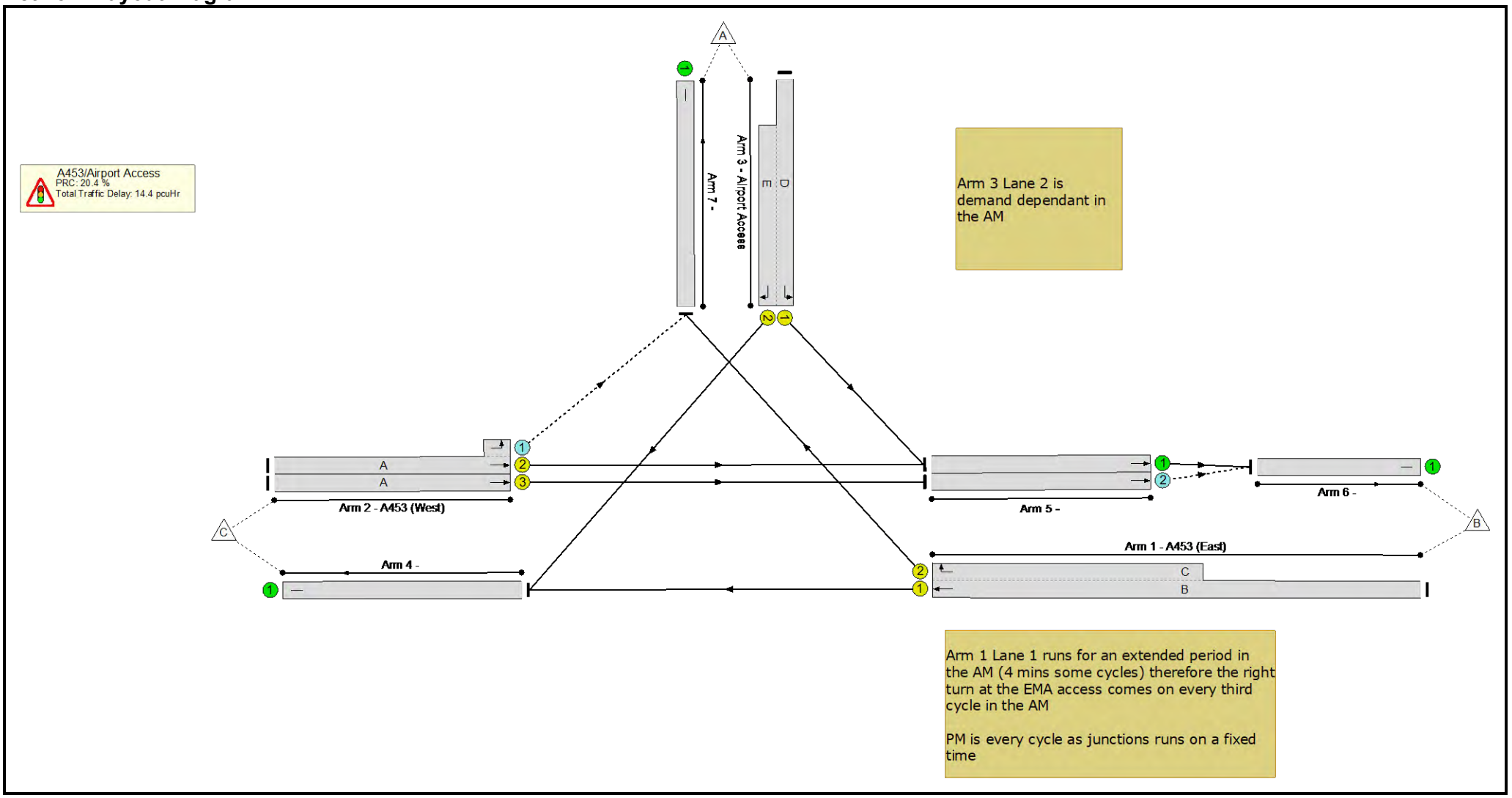
Stage	1	2	1	2	1	2	3
Duration	46	18	57	19	57	10	16
Change Point	0	52	77	141	167	231	248

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.7%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.7%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1:3	242:50	-	591	1965:1854	427+364	74.7 : 74.7%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		3	160	-	828	1965:1439	558+552	74.6 : 74.6%
2/3	A453 (West) Ahead	U	N/A	N/A	A		3	160	-	229	2105	1271	18.0%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		3:1	69:16	-	259	1805:1830	244+115	72.0 : 72.0%
4/1		U	N/A	N/A	-		-	-	-	402	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	592	1965	1965	30.1%
5/2	Ahead	O	N/A	N/A	-		-	-	-	229	2105	585	39.2%
6/1		U	N/A	N/A	-		-	-	-	821	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	684	Inf	Inf	0.0%

Full Input Data And Results

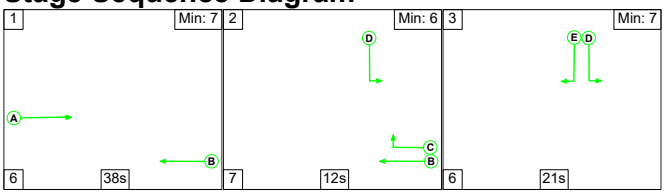
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**282**	**359**	**0**	**9.6**	**4.8**	**0.0**	**14.4**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**282**	**359**	**0**	**9.6**	**4.8**	**0.0**	**14.4**	**-**	**-**	**-**	**-**
1/1+1/2	591	591	-	-	-	2.7	1.5	-	4.2 (0.9+3.3)	25.5 (10.5:43.1)	7.0	1.5	8.4
2/2+2/1	828	828	53	359	0	1.9	1.5	-	3.4 (2.0+1.4)	14.7 (17.2:12.2)	15.4	1.5	16.9
2/3	229	229	-	-	-	0.5	0.1	-	0.6	9.9	3.1	0.1	3.2
3/1+3/2	259	259	-	-	-	4.2	1.3	-	5.4 (2.2+3.3)	75.6 (44.5:141.6)	6.1	1.3	7.4
4/1	402	402	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	592	592	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
5/2	229	229	229	0	0	0.2	0.3	-	0.6	8.8	4.8	0.3	5.1
6/1	821	821	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	684	684	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 20.4 Total Delay for Signalled Lanes (pcuHr): 13.64 Cycle Time (s): 270
PRC Over All Lanes (%): 20.4 Total Delay Over All Lanes(pcuHr): 14.41

Full Input Data And Results

Scenario 6: '1a 2028 Forecast Year With Development (PM)' (FG6: '1a 2028 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

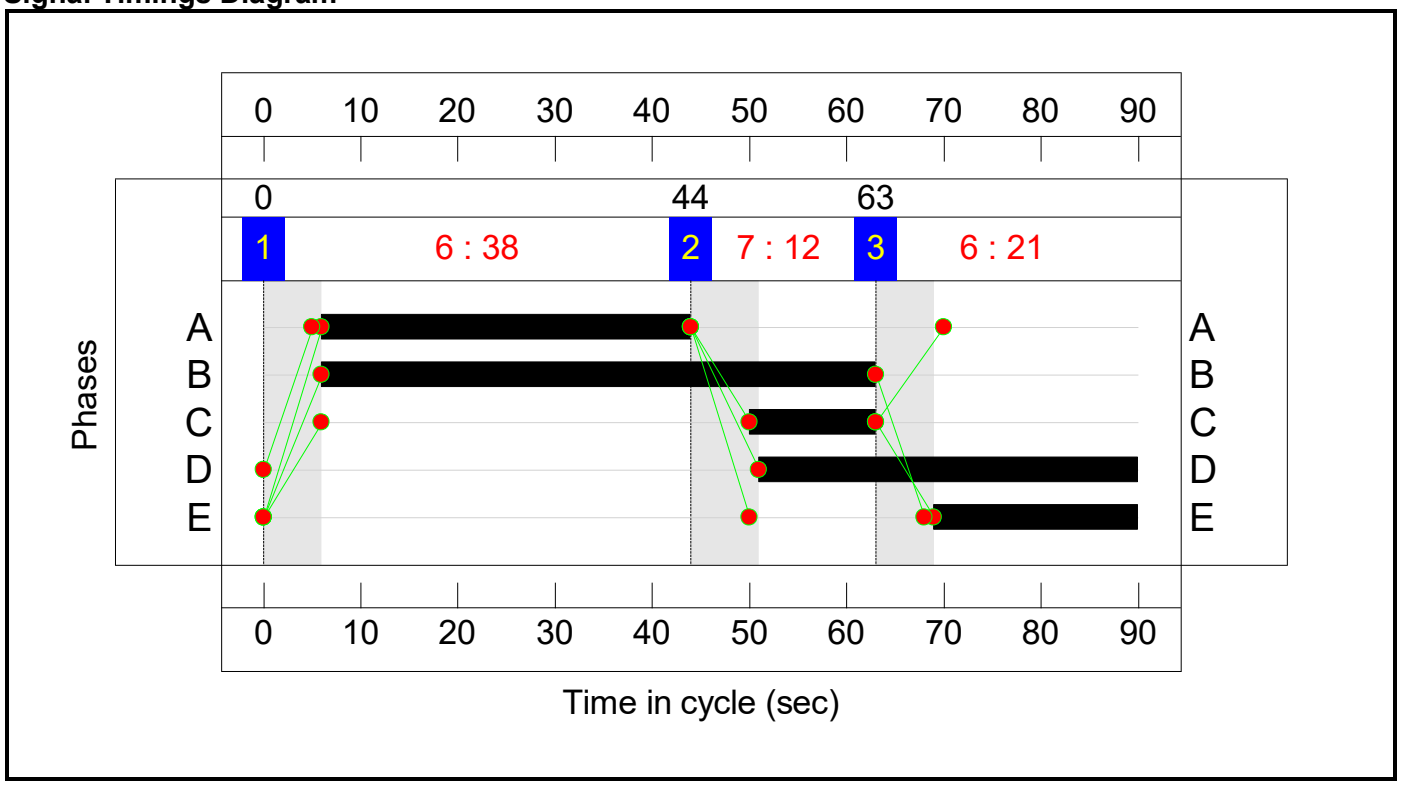
Stage Sequence Diagram



Stage Timings

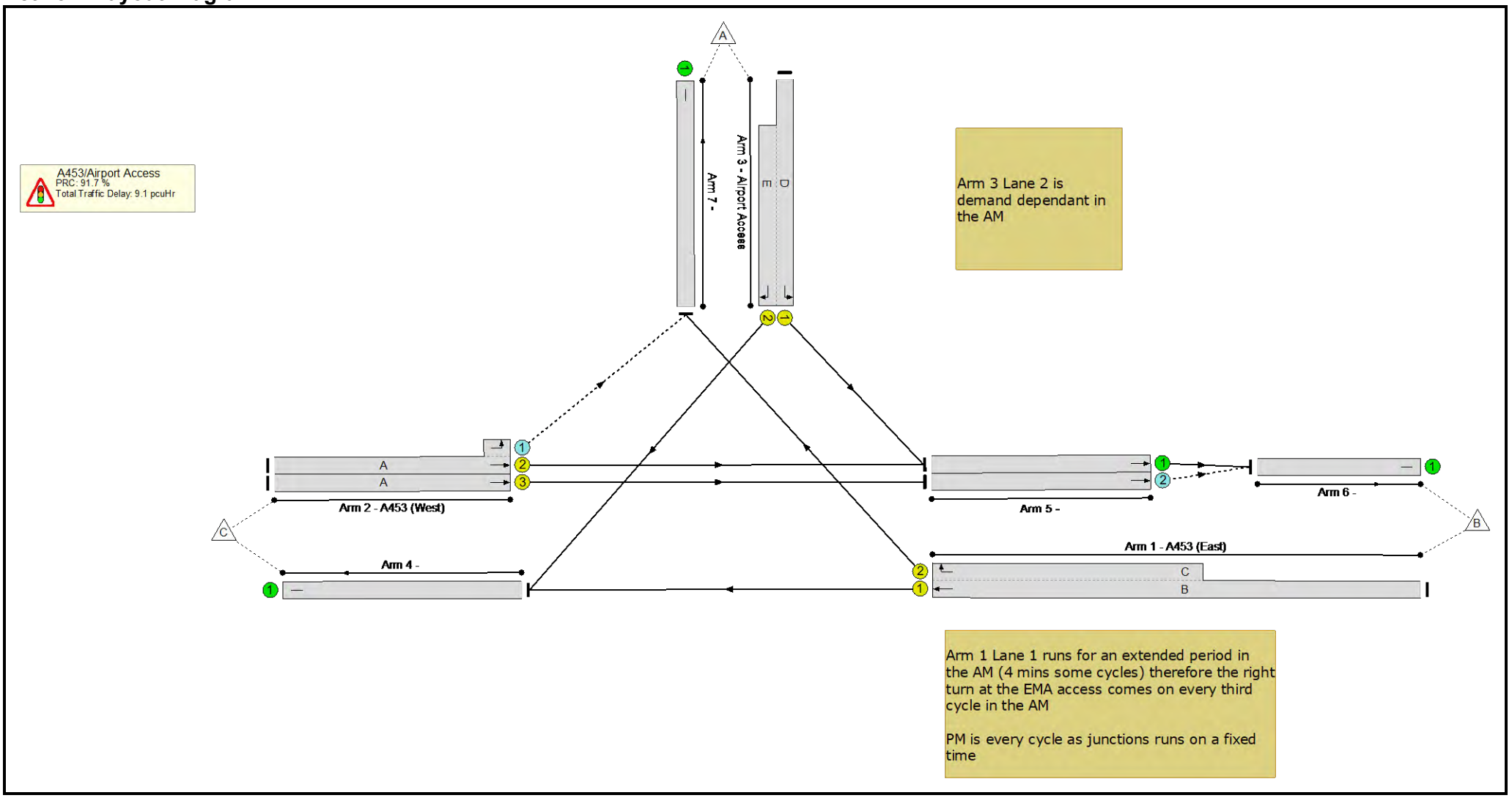
Stage	1	2	3
Duration	38	12	21
Change Point	0	44	63

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.0%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.0%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1	57:13	-	703	1965:1854	1212+285	47.0 : 47.0%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		1	38	-	379	1965:1439	643+178	46.2 : 46.2%
2/3	A453 (West) Ahead	U	N/A	N/A	A		1	38	-	100	2105	912	11.0%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		1	39:21	-	490	1805:1830	692+447	41.3 : 45.6%
4/1		U	N/A	N/A	-		-	-	-	773	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	583	1965	1965	29.7%
5/2	Ahead	O	N/A	N/A	-		-	-	-	100	2105	587	17.0%
6/1		U	N/A	N/A	-		-	-	-	683	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	216	Inf	Inf	0.0%

Full Input Data And Results

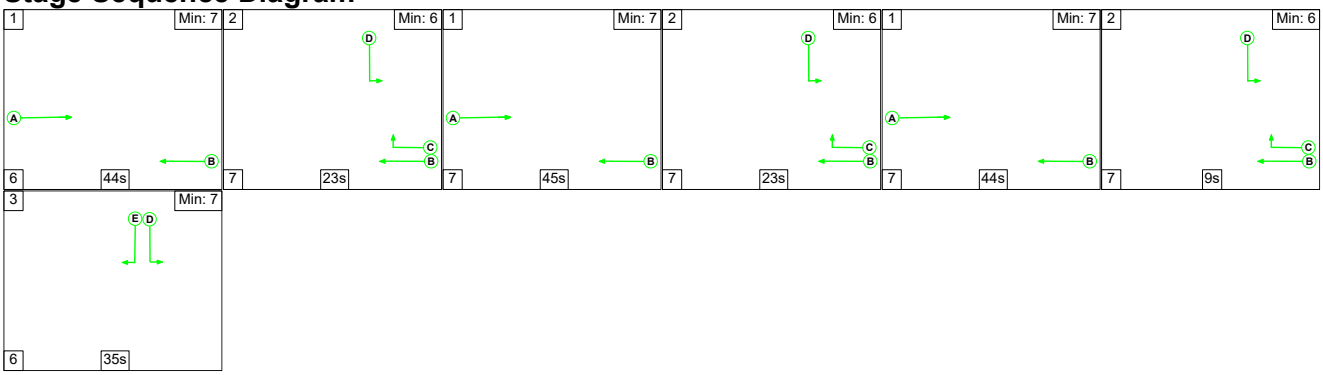
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**113**	**69**	**0**	**7.5**	**1.6**	**0.0**	**9.1**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**113**	**69**	**0**	**7.5**	**1.6**	**0.0**	**9.1**	**-**	**-**	**-**	**-**
1/1+1/2	703	703	-	-	-	2.6	0.4	-	3.0 (1.6+1.4)	15.3 (10.3:36.9)	7.1	0.4	7.6
2/2+2/1	379	379	13	69	0	1.6	0.4	-	2.0 (1.8+0.2)	18.8 (21.5:9.3)	6.0	0.4	6.4
2/3	100	100	-	-	-	0.4	0.1	-	0.5	17.4	1.5	0.1	1.5
3/1+3/2	490	490	-	-	-	3.0	0.4	-	3.3 (1.5+1.8)	24.4 (19.3:31.7)	4.7	0.4	5.1
4/1	773	773	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	583	583	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
5/2	100	100	100	0	0	0.0	0.1	-	0.1	5.3	1.7	0.1	1.8
6/1	683	683	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	216	216	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 91.7 Total Delay for Signalled Lanes (pcuHr): 8.79 Cycle Time (s): 90
PRC Over All Lanes (%): 91.7 Total Delay Over All Lanes(pcuHr): 9.15

Full Input Data And Results

Scenario 7: '1a 2038 Forecast Year Without Development (AM)' (FG7: '1a 2038 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

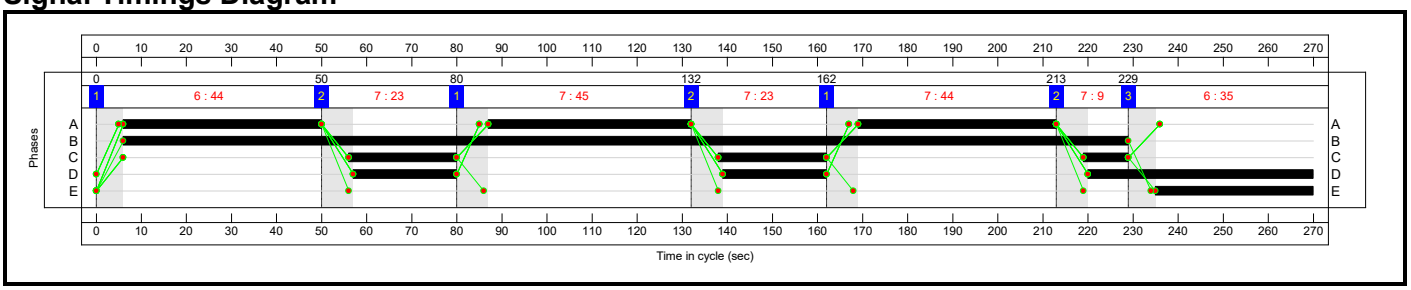
Stage Sequence Diagram



Stage Timings

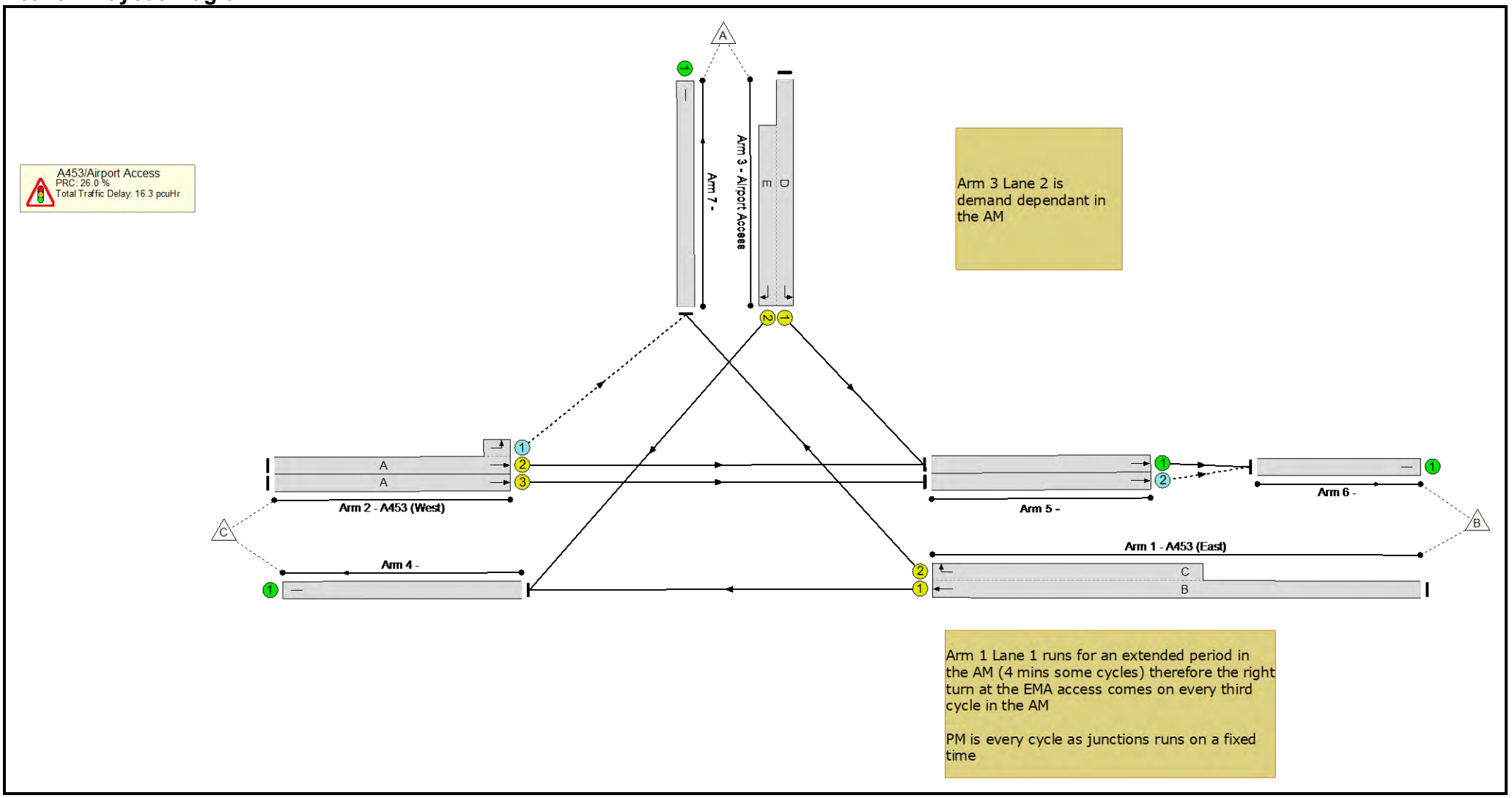
Stage	1	2	1	2	1	2	3
Duration	44	23	45	23	44	9	35
Change Point	0	50	80	132	162	213	229

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.4%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.4%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1:3	223:58	-	721	1965:1854	605+419	70.4 : 70.4%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		3	133	-	663	1965:1439	412+517	71.4 : 71.4%
2/3	A453 (West) Ahead	U	N/A	N/A	A		3	133	-	190	2105	1060	17.9%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		3:1	96:35	-	331	1805:1830	240+227	70.9 : 70.9%
4/1		U	N/A	N/A	-		-	-	-	587	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	464	1965	1965	23.6%
5/2	Ahead	O	N/A	N/A	-		-	-	-	190	2105	613	31.0%
6/1		U	N/A	N/A	-		-	-	-	654	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	664	Inf	Inf	0.0%

Full Input Data And Results

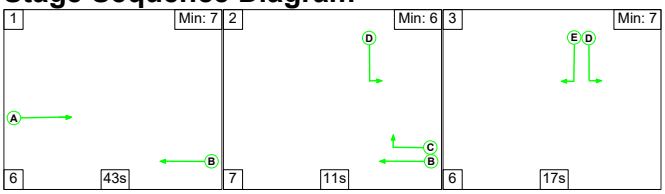
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**261**	**298**	**0**	**12.2**	**4.1**	**0.0**	**16.3**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**261**	**298**	**0**	**12.2**	**4.1**	**0.0**	**16.3**	**-**	**-**	**-**	**-**
1/1+1/2	721	721	-	-	-	3.4	1.2	-	4.6 (1.3+3.3)	22.9 (10.9:40.3)	9.3	1.2	10.5
2/2+2/1	663	663	71	298	0	2.0	1.2	-	3.2 (1.8+1.4)	17.4 (22.3:13.5)	14.3	1.2	15.5
2/3	190	190	-	-	-	0.7	0.1	-	0.8	15.2	3.6	0.1	3.7
3/1+3/2	331	331	-	-	-	5.9	1.2	-	7.1 (1.6+5.6)	77.3 (32.9:124.2)	11.4	1.2	12.6
4/1	587	587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	464	464	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
5/2	190	190	190	0	0	0.2	0.2	-	0.4	8.4	4.9	0.2	5.1
6/1	654	654	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	664	664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 26.0 Total Delay for Signalled Lanes (pcuHr): 15.71 Cycle Time (s): 270
PRC Over All Lanes (%): 26.0 Total Delay Over All Lanes(pcuHr): 16.30

Full Input Data And Results

Scenario 8: '1a 2038 Forecast Year Without Development (PM)' (FG8: '1a 2038 Forecast Year Without Development (PM)', Plan 2: 'Network Control Plan 2')

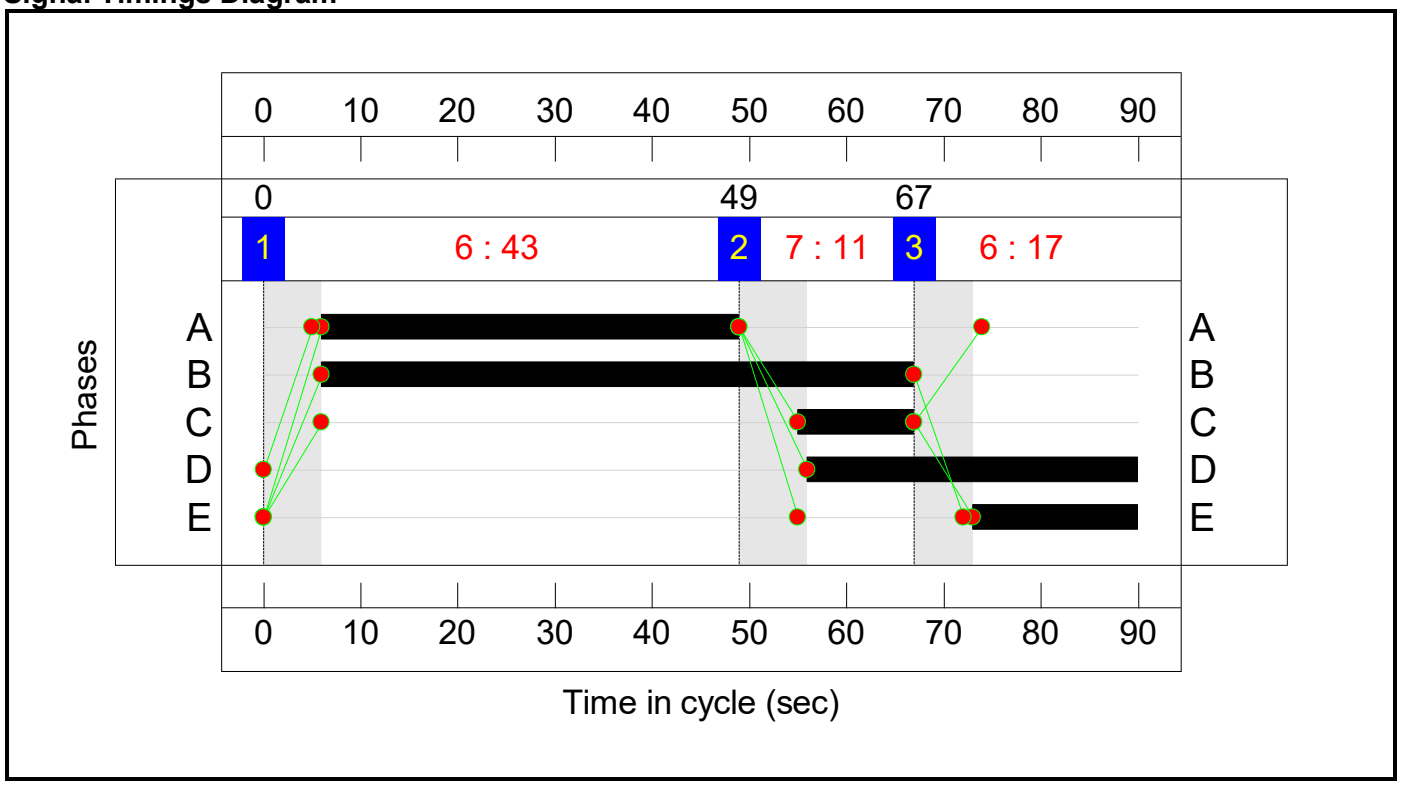
Stage Sequence Diagram



Stage Timings

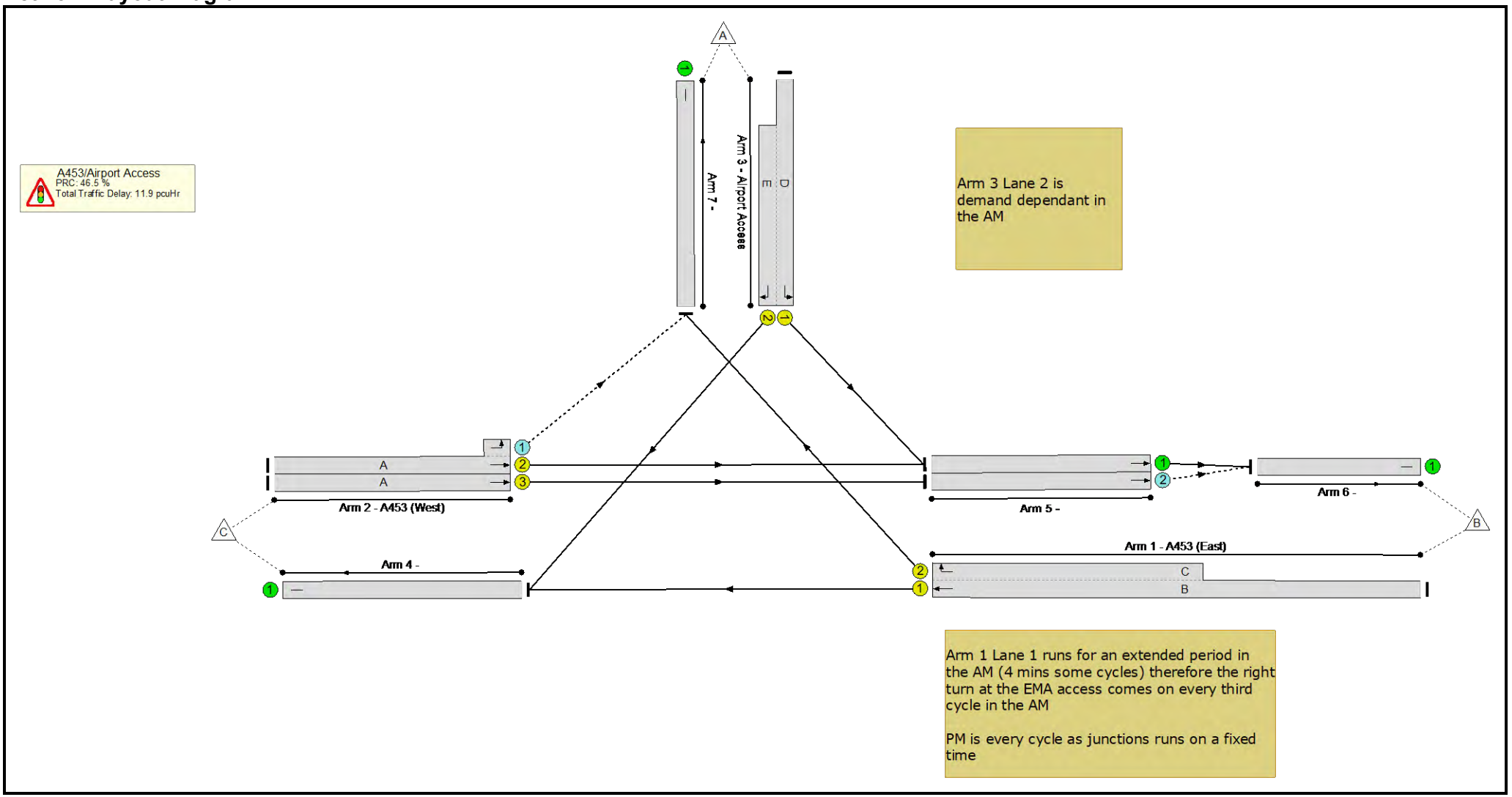
Stage	1	2	3
Duration	43	11	17
Change Point	0	49	67

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**61.4%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**61.4%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1	61:12	-	638	1965:1854	1261+268	38.5 : 56.8%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		1	43	-	566	1965:1439	716+205	61.4 : 61.4%
2/3	A453 (West) Ahead	U	N/A	N/A	A		1	43	-	148	2105	1029	14.4%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		1	34:17	-	603	1805:1830	685+366	56.6 : 58.7%
4/1		U	N/A	N/A	-		-	-	-	701	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	828	1965	1965	42.1%
5/2	Ahead	O	N/A	N/A	-		-	-	-	148	2105	533	27.8%
6/1		U	N/A	N/A	-		-	-	-	976	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	278	Inf	Inf	0.0%

Full Input Data And Results

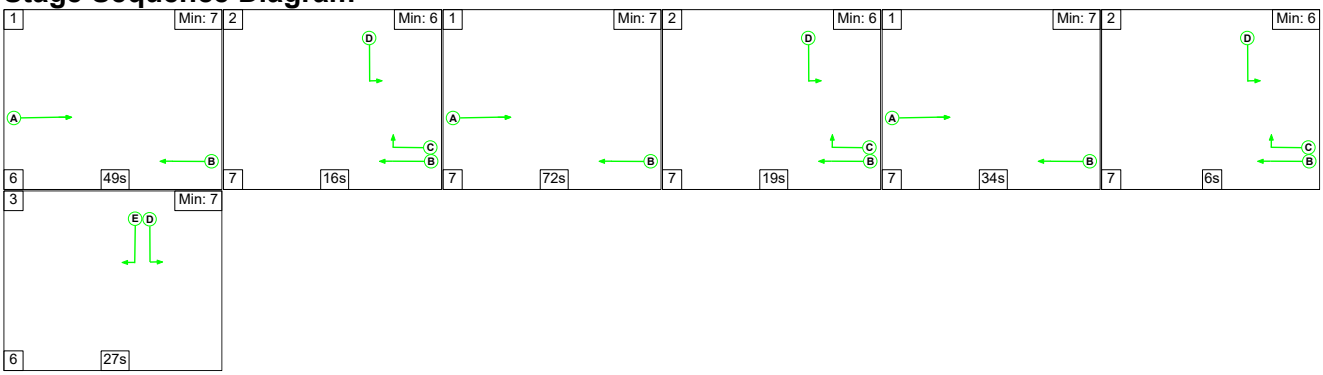
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**165**	**109**	**0**	**9.5**	**2.5**	**0.0**	**11.9**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**165**	**109**	**0**	**9.5**	**2.5**	**0.0**	**11.9**	**-**	**-**	**-**	**-**
1/1+1/2	638	638	-	-	-	2.3	0.4	-	2.7 (1.1+1.6)	15.0 (7.8:37.9)	5.0	0.4	5.4
2/2+2/1	566	566	17	109	0	2.2	0.8	-	3.0 (2.6+0.5)	19.3 (21.1:13.0)	9.5	0.8	10.3
2/3	148	148	-	-	-	0.5	0.1	-	0.6	14.7	2.0	0.1	2.1
3/1+3/2	603	603	-	-	-	4.3	0.7	-	4.9 (2.7+2.2)	29.4 (25.4:36.6)	7.5	0.7	8.2
4/1	701	701	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	828	828	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
5/2	148	148	148	0	0	0.1	0.2	-	0.3	8.0	2.7	0.2	2.9
6/1	976	976	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	278	278	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 46.5 Total Delay for Signalled Lanes (pcuHr): 11.22 Cycle Time (s): 90
PRC Over All Lanes (%): 46.5 Total Delay Over All Lanes(pcuHr): 11.91

Full Input Data And Results

Scenario 9: '1a 2038 Forecast Year With Development (AM)' (FG9: '1a 2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

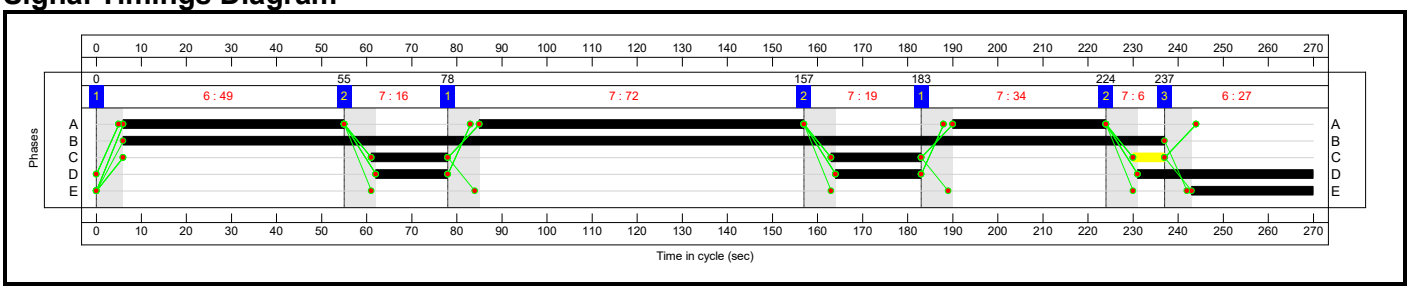
Stage Sequence Diagram



Stage Timings

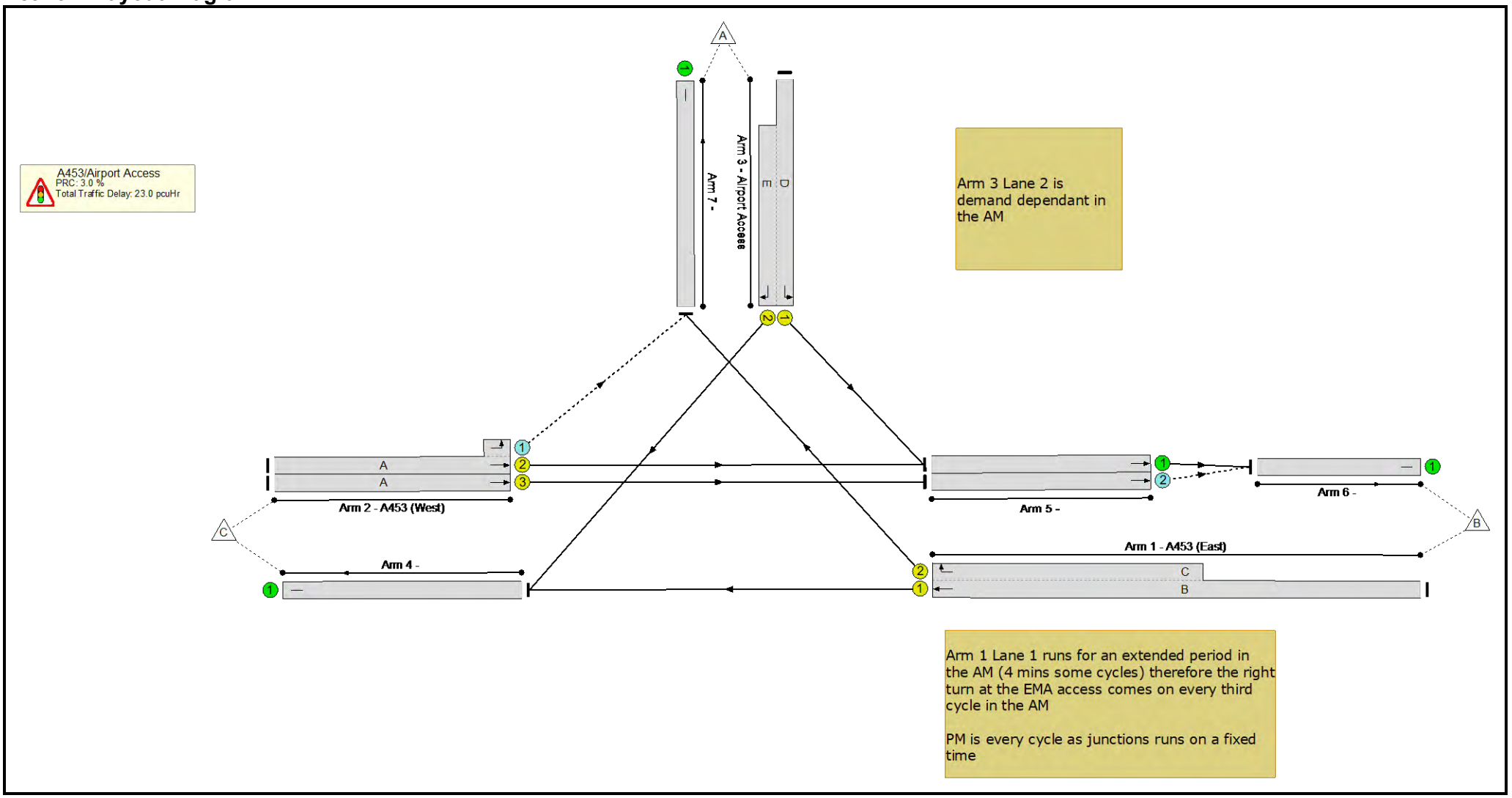
Stage	1	2	1	2	1	2	3
Duration	49	16	72	19	34	6	27
Change Point	0	55	78	157	183	224	237

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.3%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.3%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1:3	231:44	-	609	1965:1854	384+323	86.1 : 86.1%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		3	155	-	759	1965:1439	246+623	87.3 : 87.3%
2/3	A453 (West) Ahead	U	N/A	N/A	A		3	155	-	351	2105	1232	28.5%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		3:1	74:27	-	334	1805:1830	194+190	86.9 : 86.9%
4/1		U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	384	1965	1965	19.5%
5/2	Ahead	O	N/A	N/A	-		-	-	-	351	2105	630	55.7%
6/1		U	N/A	N/A	-		-	-	-	735	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	822	Inf	Inf	0.0%

Full Input Data And Results

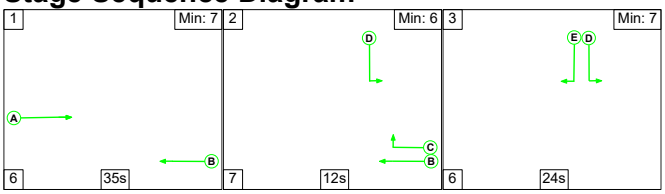
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**414**	**481**	**0**	**12.8**	**10.1**	**0.0**	**23.0**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**414**	**481**	**0**	**12.8**	**10.1**	**0.0**	**23.0**	**-**	**-**	**-**	**-**
1/1+1/2	609	609	-	-	-	3.3	2.9	-	6.2 (1.9+4.4)	36.9 (20.5:56.4)	8.5	2.9	11.4
2/2+2/1	759	759	63	481	0	1.1	3.3	-	4.3 (1.5+2.8)	20.5 (25.2:18.7)	10.3	3.3	13.6
2/3	351	351	-	-	-	1.0	0.2	-	1.2	12.0	5.9	0.2	6.1
3/1+3/2	334	334	-	-	-	6.7	3.0	-	9.7 (2.8+6.9)	104.6 (59.0:151.3)	12.1	3.0	15.1
4/1	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	384	384	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
5/2	351	351	351	0	0	0.8	0.6	-	1.4	14.2	9.8	0.6	10.5
6/1	735	735	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	822	822	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 3.0 Total Delay for Signalled Lanes (pcuHr): 21.44 Cycle Time (s): 270
PRC Over All Lanes (%): 3.0 Total Delay Over All Lanes(pcuHr): 22.95

Full Input Data And Results

Scenario 10: '1a 2038 Forecast Year With Development (PM)' (FG10: '1a 2038 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

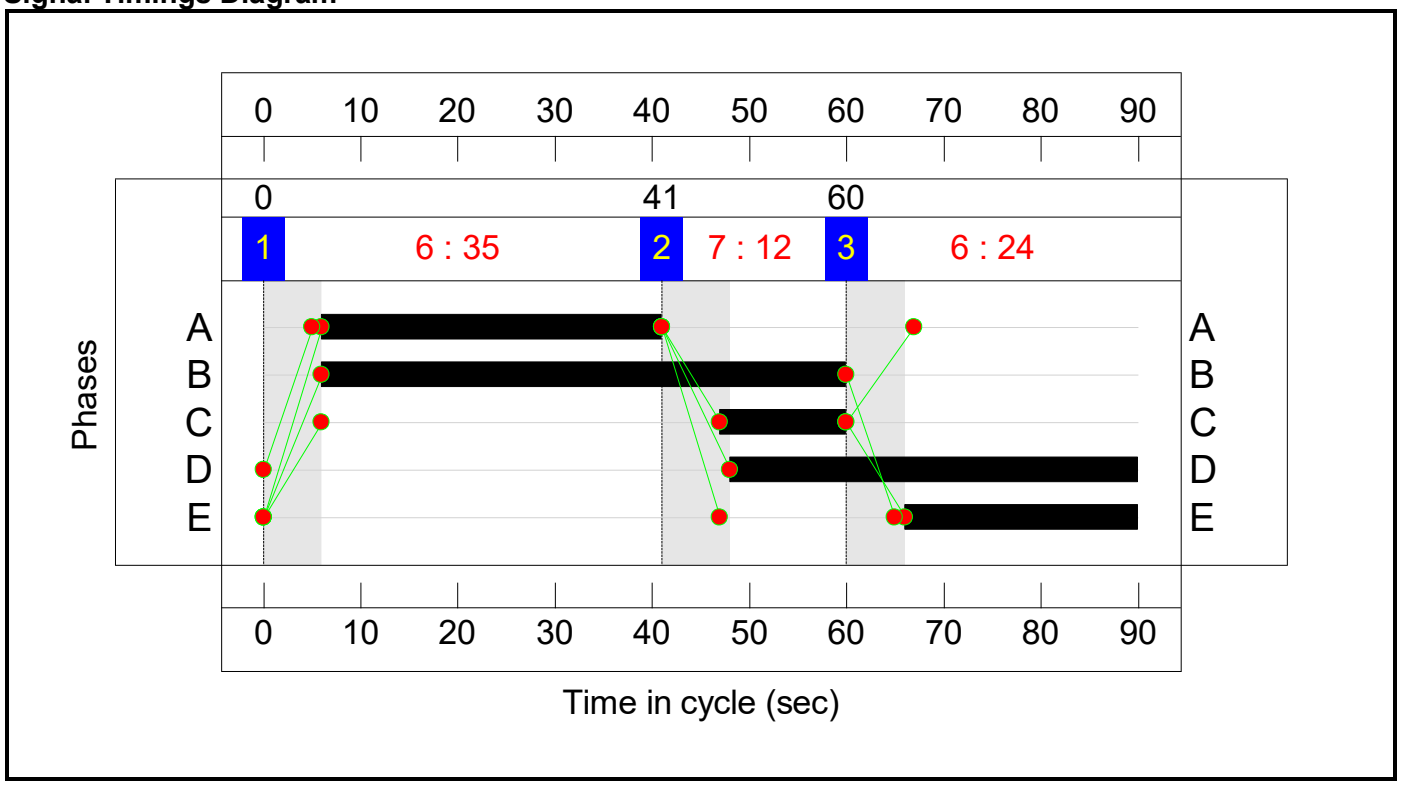
Stage Sequence Diagram



Stage Timings

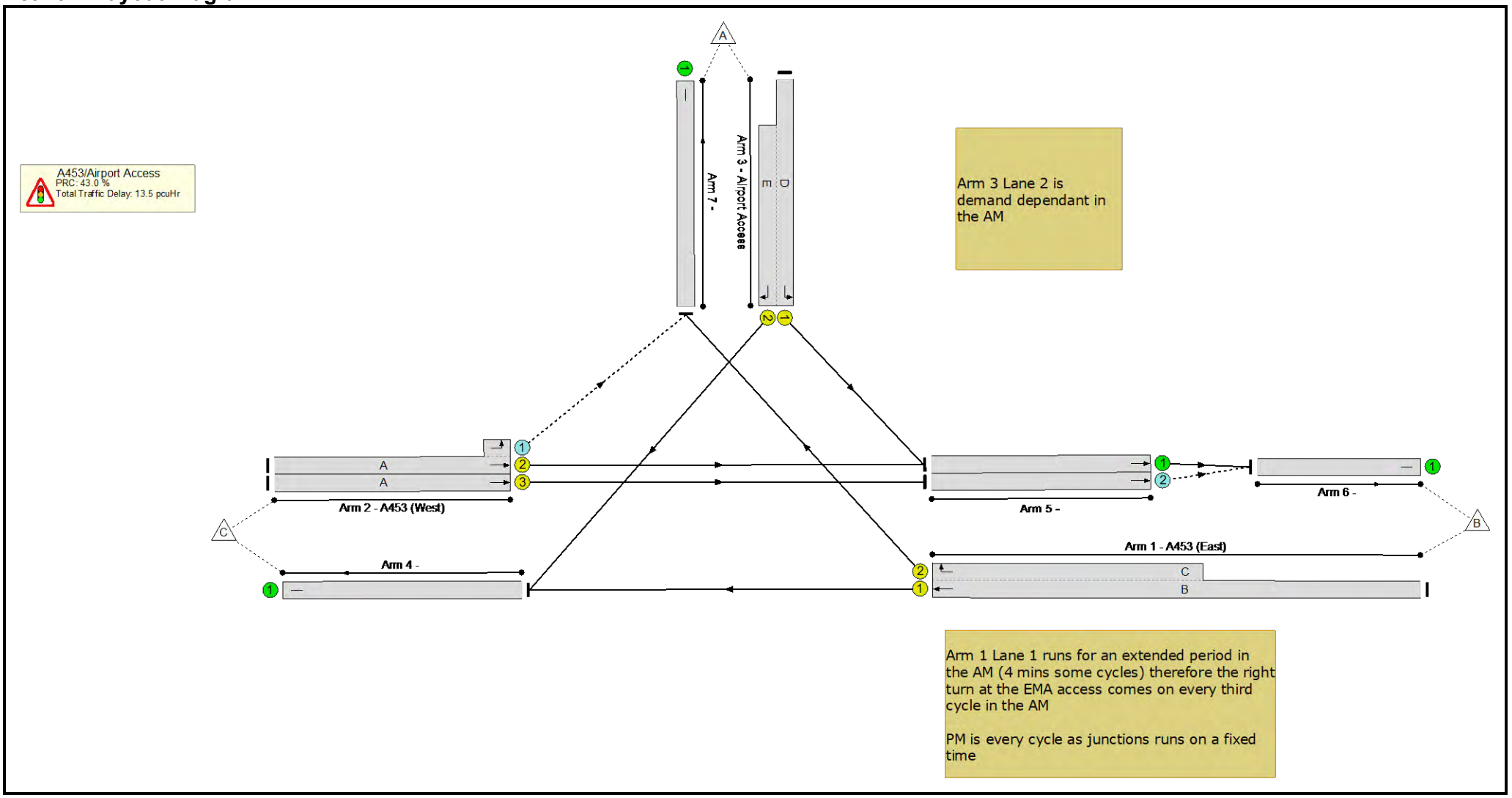
Stage	1	2	3
Duration	35	12	24
Change Point	0	41	60

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**63.0%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**63.0%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1	54:13	-	820	1965:1854	1155+288	56.4 : 58.6%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		1	35	-	469	1965:1439	541+216	61.9 : 61.9%
2/3	A453 (West) Ahead	U	N/A	N/A	A		1	35	-	141	2105	842	16.7%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		1	42:24	-	685	1805:1830	580+508	63.0 : 63.0%
4/1		U	N/A	N/A	-		-	-	-	971	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	700	1965	1965	35.6%
5/2	Ahead	O	N/A	N/A	-		-	-	-	141	2105	561	25.1%
6/1		U	N/A	N/A	-		-	-	-	841	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	303	Inf	Inf	0.0%

Full Input Data And Results

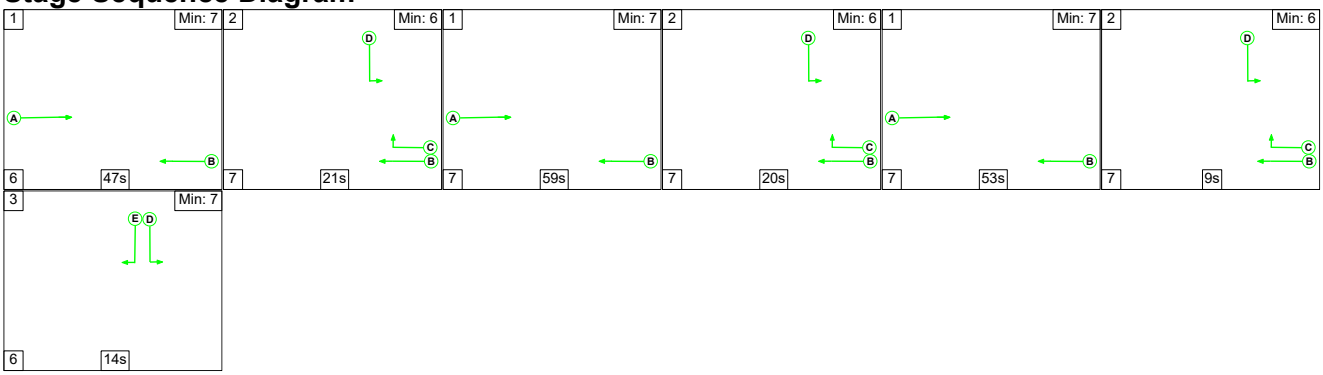
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**162**	**113**	**0**	**10.7**	**2.9**	**0.0**	**13.5**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**162**	**113**	**0**	**10.7**	**2.9**	**0.0**	**13.5**	**-**	**-**	**-**	**-**
1/1+1/2	820	820	-	-	-	3.5	0.7	-	4.2 (2.4+1.8)	18.2 (13.1:38.2)	9.4	0.7	10.1
2/2+2/1	469	469	21	113	0	2.2	0.8	-	3.0 (2.5+0.5)	23.3 (26.7:14.7)	8.3	0.8	9.1
2/3	141	141	-	-	-	0.7	0.1	-	0.8	19.9	2.2	0.1	2.3
3/1+3/2	685	685	-	-	-	4.1	0.8	-	4.9 (2.0+2.9)	25.9 (19.8:32.9)	6.9	0.8	7.8
4/1	971	971	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	700	700	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
5/2	141	141	141	0	0	0.2	0.2	-	0.3	8.4	2.9	0.2	3.1
6/1	841	841	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	303	303	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 43.0 Total Delay for Signalled Lanes (pcuHr): 12.90 Cycle Time (s): 90
PRC Over All Lanes (%): 43.0 Total Delay Over All Lanes(pcuHr): 13.51

Full Input Data And Results

Scenario 11: '2a 2028 Forecast Year With Development (AM)' (FG11: '2a 2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

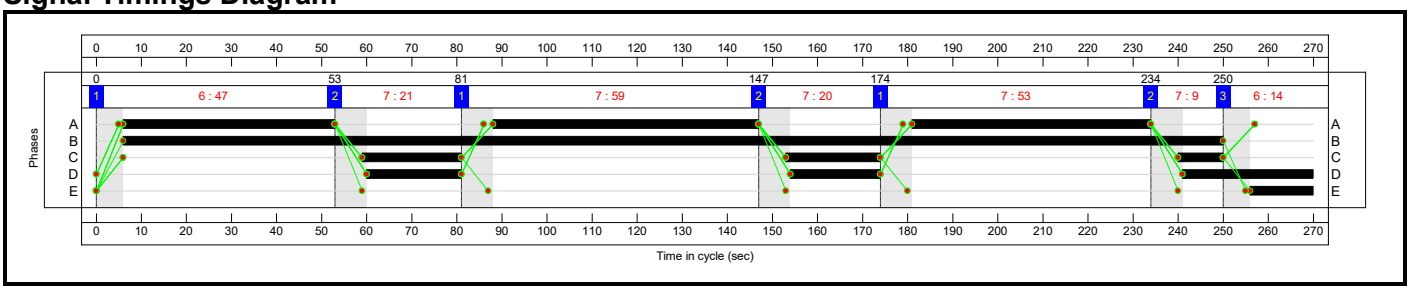
Stage Sequence Diagram



Stage Timings

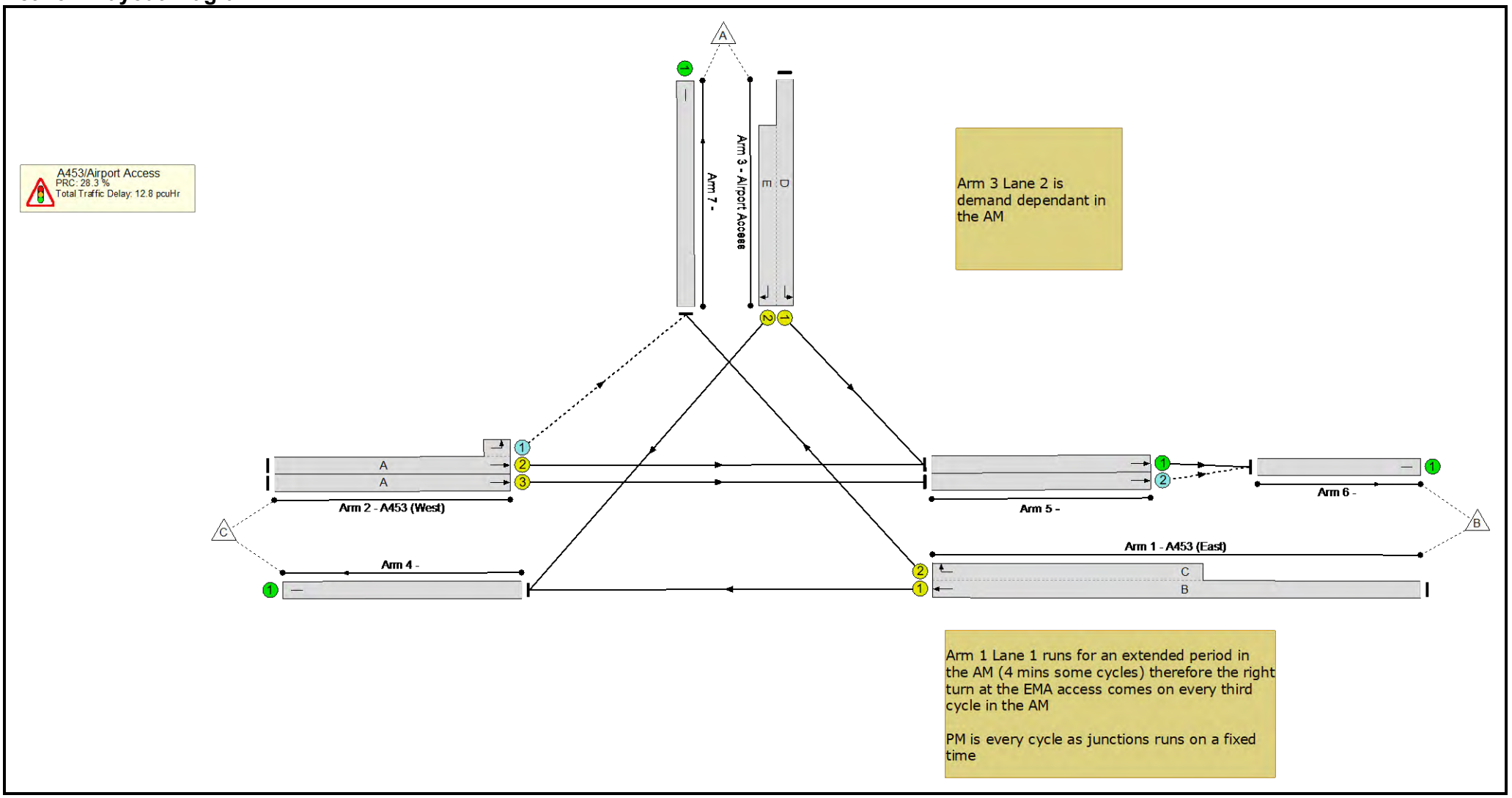
Stage	1	2	1	2	1	2	3
Duration	47	21	59	20	53	9	14
Change Point	0	53	81	147	174	234	250

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**70.1%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**70.1%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1:3	244:53	-	628	1965:1854	520+385	69.4 : 69.4%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		3	159	-	774	1965:1439	689+415	70.1 : 70.1%
2/3	A453 (West) Ahead	U	N/A	N/A	A		3	159	-	208	2105	1263	16.5%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		3:1	70:14	-	246	1805:1830	266+102	66.9 : 66.9%
4/1		U	N/A	N/A	-		-	-	-	429	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	661	1965	1965	33.6%
5/2	Ahead	O	N/A	N/A	-		-	-	-	208	2105	570	36.5%
6/1		U	N/A	N/A	-		-	-	-	869	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	558	Inf	Inf	0.0%

Full Input Data And Results

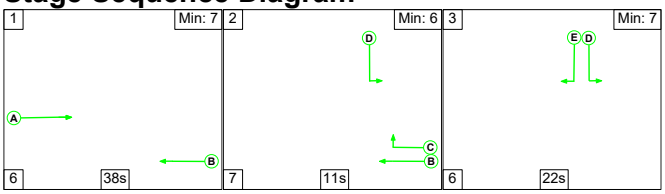
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**241**	**258**	**0**	**8.9**	**3.9**	**0.0**	**12.8**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**241**	**258**	**0**	**8.9**	**3.9**	**0.0**	**12.8**	**-**	**-**	**-**	**-**
1/1+1/2	628	628	-	-	-	2.6	1.1	-	3.7 (0.8+2.9)	21.4 (7.9:39.7)	6.7	1.1	7.9
2/2+2/1	774	774	33	258	0	1.9	1.2	-	3.1 (2.2+0.9)	14.4 (16.5:10.9)	13.3	1.2	14.4
2/3	208	208	-	-	-	0.5	0.1	-	0.6	9.8	2.6	0.1	2.7
3/1+3/2	246	246	-	-	-	3.7	1.0	-	4.7 (2.0+2.6)	68.5 (41.3:139.6)	5.0	1.0	6.0
4/1	429	429	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	661	661	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
5/2	208	208	208	0	0	0.2	0.3	-	0.5	8.4	3.9	0.3	4.2
6/1	869	869	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	558	558	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 28.3 Total Delay for Signalled Lanes (pcuHr): 12.08 Cycle Time (s): 270
PRC Over All Lanes (%): 28.3 Total Delay Over All Lanes(pcuHr): 12.81

Full Input Data And Results

Scenario 12: '2a 2028 Forecast Year With Development (PM)' (FG12: '2a 2028 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

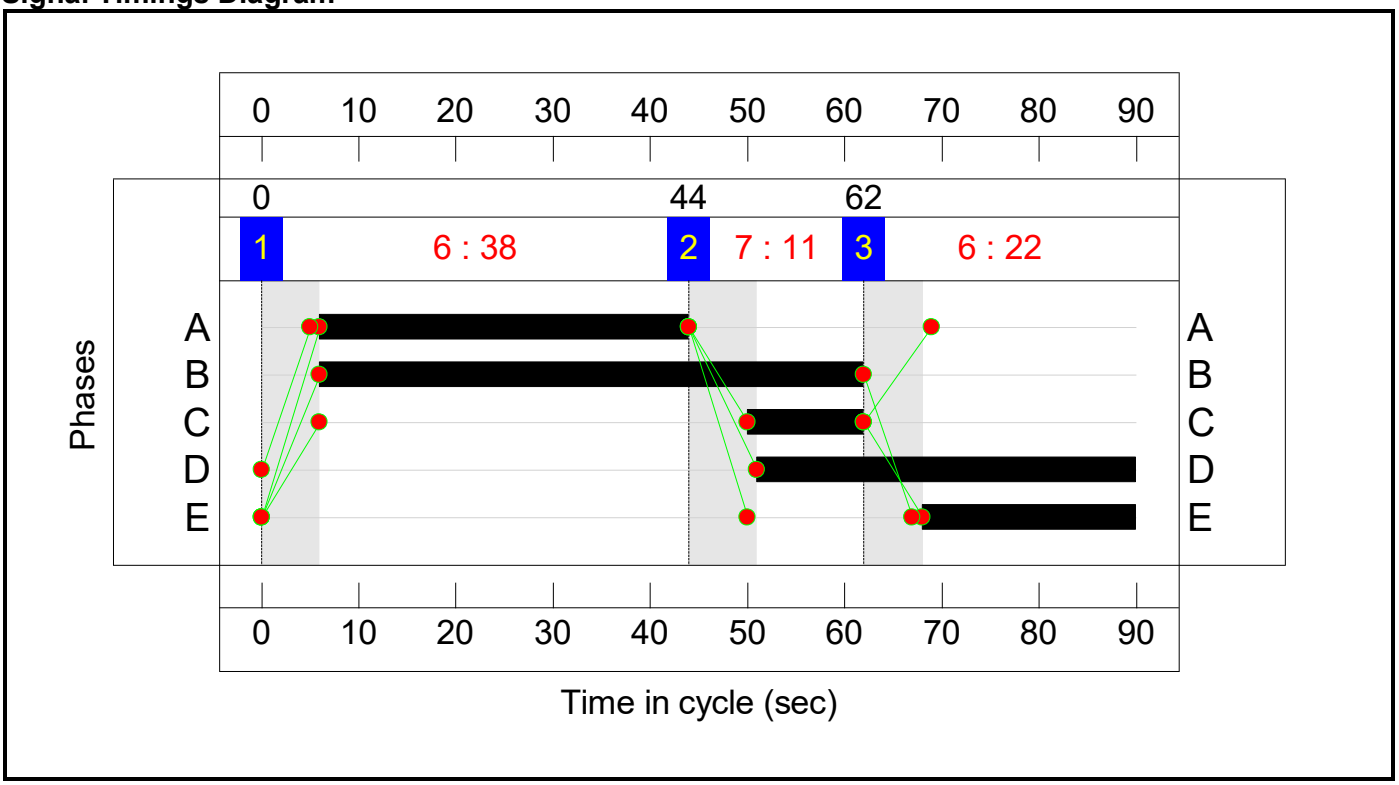
Stage Sequence Diagram



Stage Timings

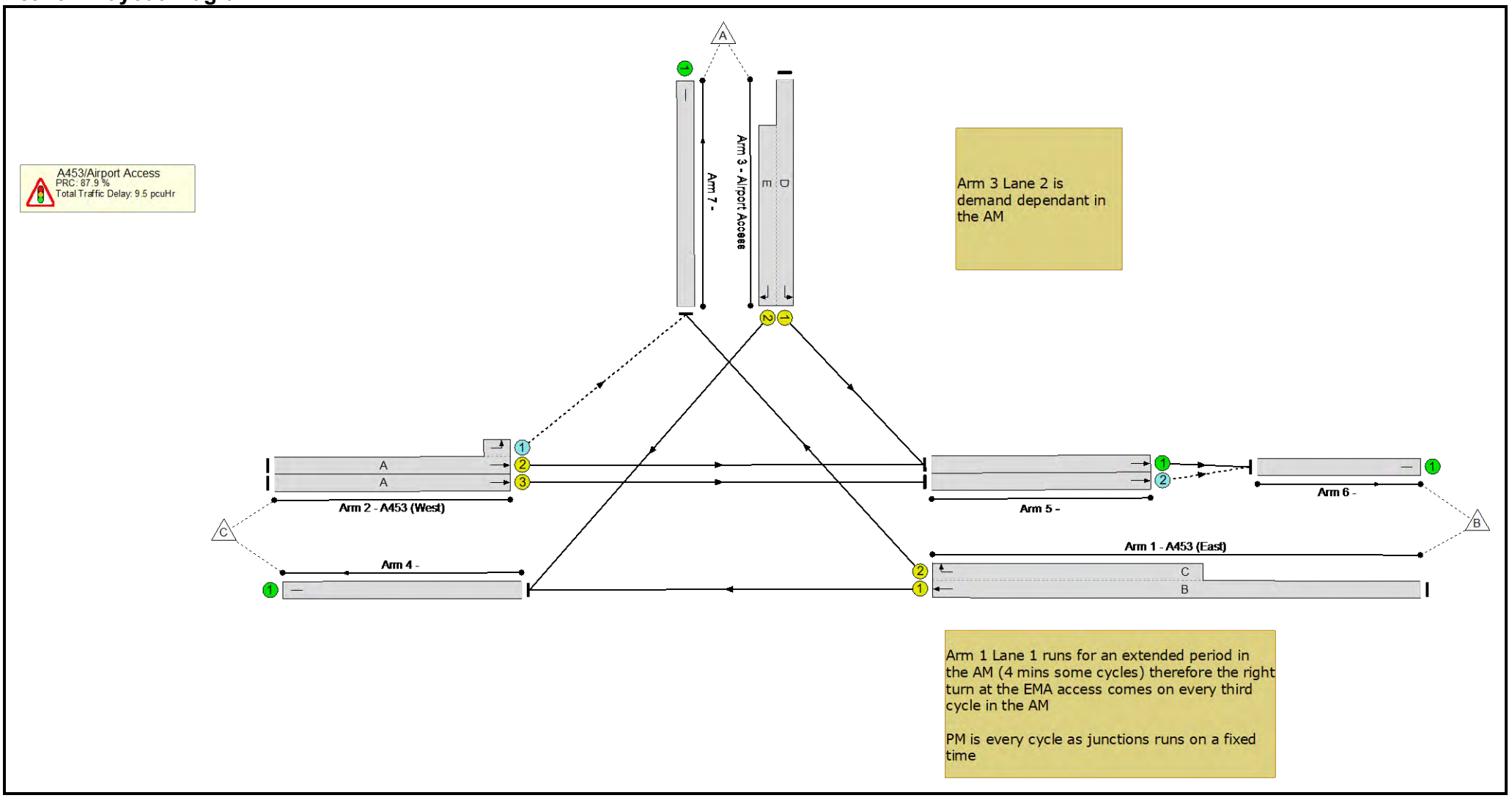
Stage	1	2	3
Duration	38	11	22
Change Point	0	44	62

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.9%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.9%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1	56:12	-	695	1965:1854	1199+255	47.8 : 47.8%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		1	38	-	385	1965:1439	646+175	46.9 : 46.9%
2/3	A453 (West) Ahead	U	N/A	N/A	A		1	38	-	110	2105	912	12.1%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		1	39:22	-	511	1805:1830	599+468	47.9 : 47.9%
4/1		U	N/A	N/A	-		-	-	-	797	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	590	1965	1965	30.0%
5/2	Ahead	O	N/A	N/A	-		-	-	-	110	2105	585	18.8%
6/1		U	N/A	N/A	-		-	-	-	700	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	204	Inf	Inf	0.0%

Full Input Data And Results

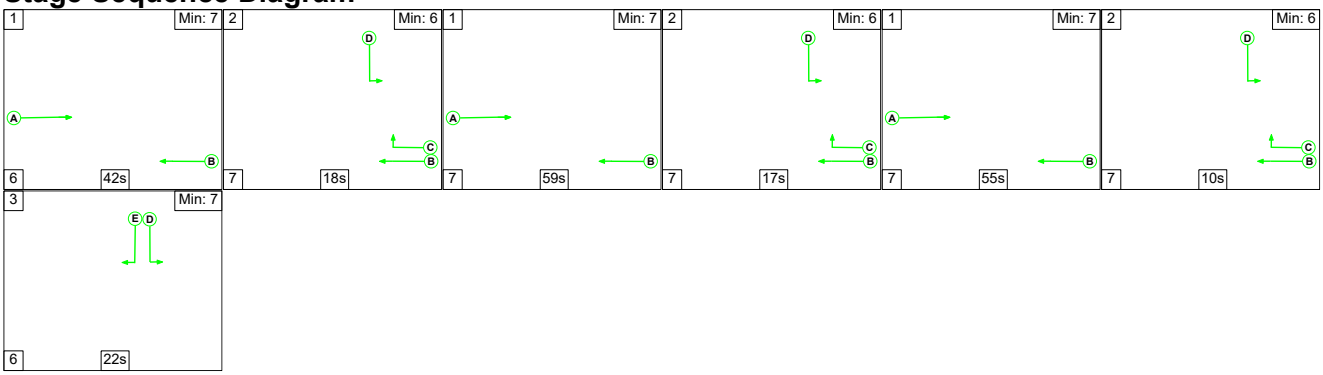
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**122**	**70**	**0**	**7.8**	**1.8**	**0.0**	**9.5**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**122**	**70**	**0**	**7.8**	**1.8**	**0.0**	**9.5**	**-**	**-**	**-**	**-**
1/1+1/2	695	695	-	-	-	2.6	0.5	-	3.0 (1.7+1.3)	15.6 (10.9:37.6)	7.3	0.5	7.8
2/2+2/1	385	385	12	70	0	1.6	0.4	-	2.0 (1.8+0.2)	19.0 (21.6:9.6)	6.0	0.4	6.5
2/3	110	110	-	-	-	0.5	0.1	-	0.5	17.5	1.6	0.1	1.7
3/1+3/2	511	511	-	-	-	3.1	0.5	-	3.5 (1.6+2.0)	25.0 (19.8:31.7)	4.7	0.5	5.2
4/1	797	797	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	590	590	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
5/2	110	110	110	0	0	0.1	0.1	-	0.2	5.9	2.0	0.1	2.1
6/1	700	700	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	204	204	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 87.9 Total Delay for Signalled Lanes (pcuHr): 9.13 Cycle Time (s): 90
PRC Over All Lanes (%): 87.9 Total Delay Over All Lanes(pcuHr): 9.52

Full Input Data And Results

Scenario 13: '2a 2038 Forecast Year With Development (AM)' (FG13: '2a 2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

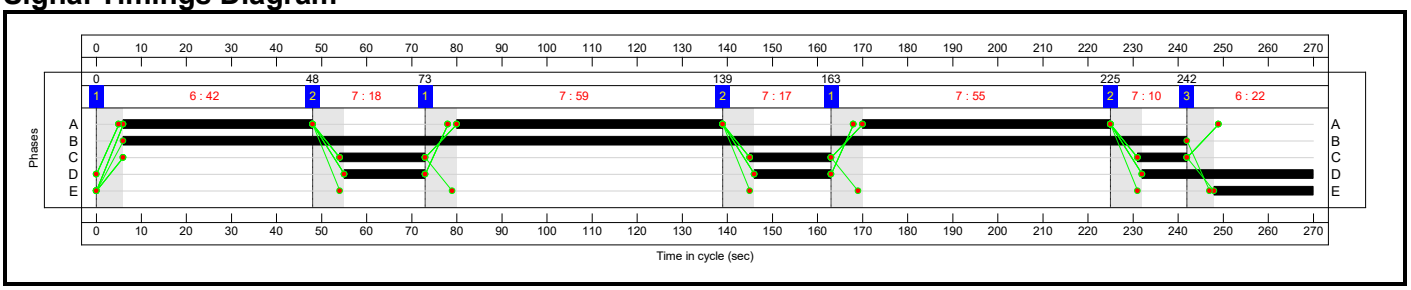
Stage Sequence Diagram



Stage Timings

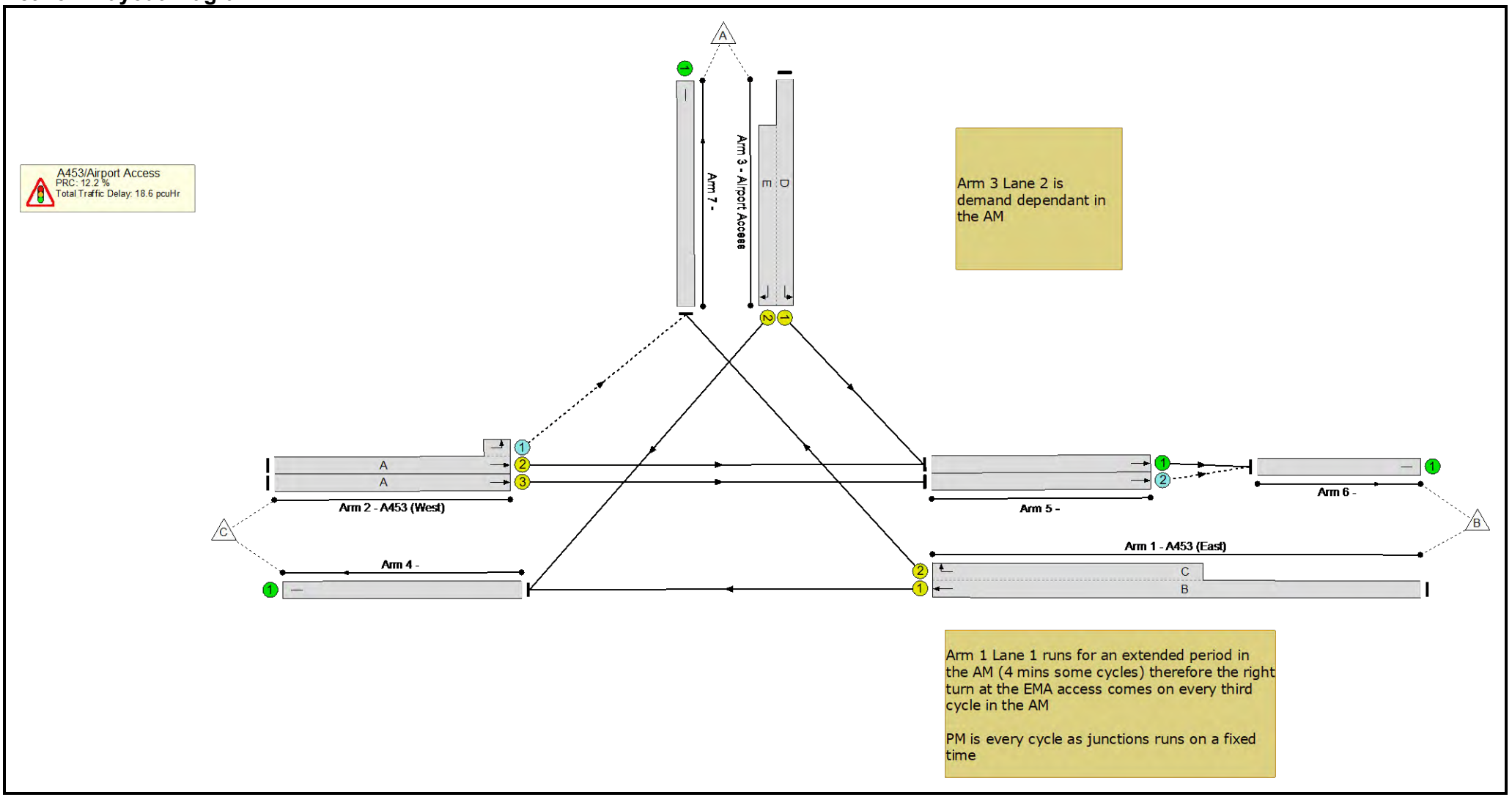
Stage	1	2	1	2	1	2	3
Duration	42	18	59	17	55	10	22
Change Point	0	48	73	139	163	225	242

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**80.2%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**80.2%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1:3	236:48	-	642	1965:1854	450+350	80.2 : 80.2%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		3	156	-	865	1965:1439	615+468	79.9 : 79.9%
2/3	A453 (West) Ahead	U	N/A	N/A	A		3	156	-	243	2105	1240	19.6%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		3:1	73:22	-	330	1805:1830	269+156	77.6 : 77.6%
4/1		U	N/A	N/A	-		-	-	-	482	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	700	1965	1965	35.6%
5/2	Ahead	O	N/A	N/A	-		-	-	-	243	2105	561	43.3%
6/1		U	N/A	N/A	-		-	-	-	943	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	655	Inf	Inf	0.0%

Full Input Data And Results

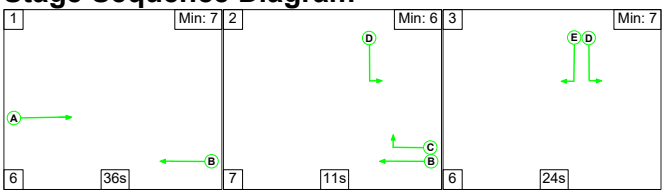
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**284**	**333**	**0**	**12.2**	**6.4**	**0.0**	**18.6**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**284**	**333**	**0**	**12.2**	**6.4**	**0.0**	**18.6**	**-**	**-**	**-**	**-**
1/1+1/2	642	642	-	-	-	3.0	2.0	-	5.0 (1.4+3.6)	27.9 (13.6:46.2)	7.4	2.0	9.4
2/2+2/1	865	865	41	333	0	2.7	2.0	-	4.6 (2.9+1.7)	19.2 (21.5:16.1)	20.6	2.0	22.5
2/3	243	243	-	-	-	0.6	0.1	-	0.7	10.9	3.8	0.1	3.9
3/1+3/2	330	330	-	-	-	5.6	1.7	-	7.3 (2.6+4.7)	79.5 (44.9:139.3)	8.9	1.7	10.5
4/1	482	482	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	700	700	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
5/2	243	243	243	0	0	0.4	0.4	-	0.7	10.9	6.2	0.4	6.6
6/1	943	943	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	655	655	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 12.2 Total Delay for Signalled Lanes (pcuHr): 17.61 Cycle Time (s): 270
PRC Over All Lanes (%): 12.2 Total Delay Over All Lanes(pcuHr): 18.62

Full Input Data And Results

Scenario 14: '2a 2038 Forecast Year With Development (PM)' (FG14: '2a 2038 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

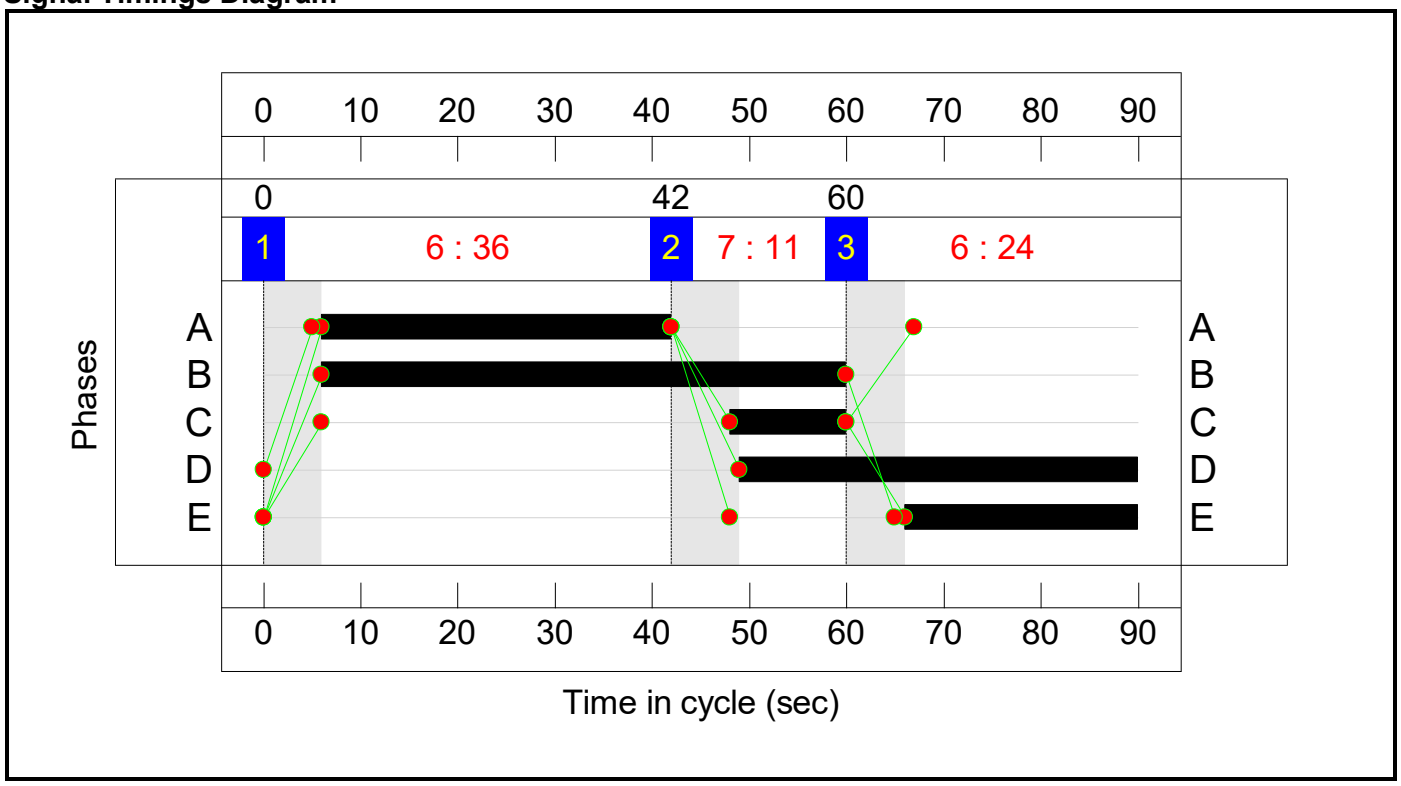
Stage Sequence Diagram



Stage Timings

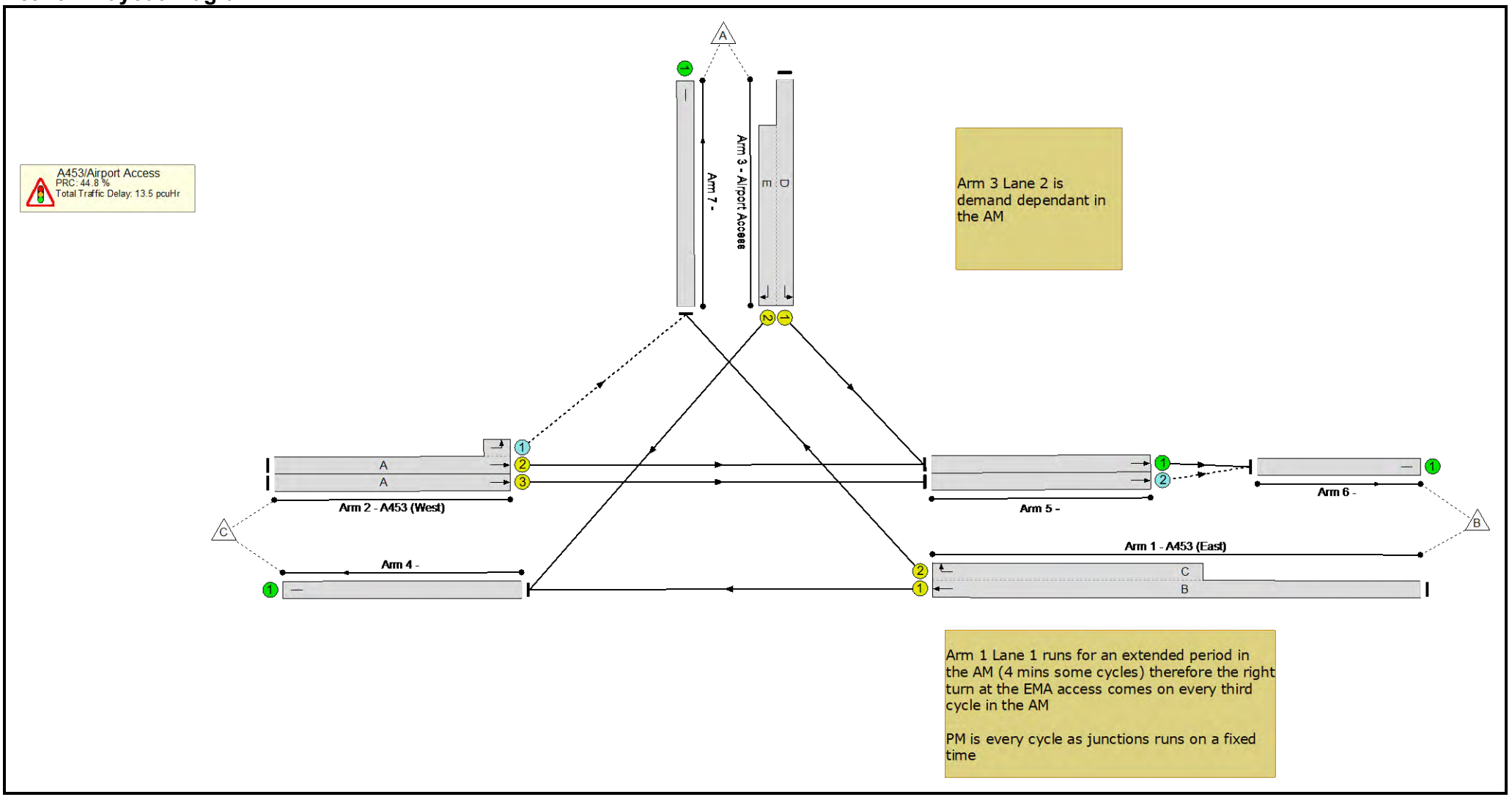
Stage	1	2	3
Duration	36	11	24
Change Point	0	42	60

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**62.2%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**62.2%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1	54:12	-	837	1965:1854	1160+268	58.6 : 58.6%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		1	36	-	477	1965:1439	588+191	61.3 : 61.3%
2/3	A453 (West) Ahead	U	N/A	N/A	A		1	36	-	124	2105	865	14.3%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		1	41:24	-	681	1805:1830	587+508	62.2 : 62.2%
4/1		U	N/A	N/A	-		-	-	-	996	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	725	1965	1965	36.9%
5/2	Ahead	O	N/A	N/A	-		-	-	-	124	2105	555	22.3%
6/1		U	N/A	N/A	-		-	-	-	849	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	274	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**141**	**100**	**0**	**10.6**	**2.8**	**0.0**	**13.5**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**141**	**100**	**0**	**10.6**	**2.8**	**0.0**	**13.5**	**-**	**-**	**-**	**-**
1/1+1/2	837	837	-	-	-	3.5	0.7	-	4.2 (2.5+1.7)	18.2 (13.4:39.0)	10.0	0.7	10.7
2/2+2/1	477	477	17	100	0	2.3	0.8	-	3.1 (2.6+0.5)	23.2 (25.9:14.8)	8.5	0.8	9.3
2/3	124	124	-	-	-	0.6	0.1	-	0.7	19.0	1.9	0.1	2.0
3/1+3/2	681	681	-	-	-	4.1	0.8	-	4.9 (2.1+2.9)	26.1 (20.4:32.7)	6.8	0.8	7.7
4/1	996	996	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	725	725	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
5/2	124	124	124	0	0	0.1	0.1	-	0.3	7.3	2.4	0.1	2.6
6/1	849	849	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	274	274	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 44.8 Total Delay for Signalled Lanes (pcuHr): 12.91 Cycle Time (s): 90
PRC Over All Lanes (%): 44.8 Total Delay Over All Lanes(pcuHr): 13.45

APPENDIX 52: Junction 7: A453/Grimes Gate Priority Junction Stage 1A/2A Modelling Results

Junctions 11

PICADY 11 - Priority Intersection Module

Version: 11.0.0.2177
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Filename: 250619_A453_Grimes Gate PICADY Model_Stage 1a+2a.j11
Path: J:\2022\220500-East Midlands Gateway Phase 2 (1)\ProjectDelivery\01-WIP\DesignAndCalculations\T&I Planning\Traffic Models\7. A453_Grimes Gate
Report generation date: 20/06/2025 15:56:06

»2022 | Observed | AM
»2022 | Observed | PM
»2028 | WoD Flows | AM
»2028 | WoD Flows | PM
»2028 | WD Flows | AM
»2028 | WD Flows | PM
»2038 | WoD Flows | AM
»2038 | WoD Flows | PM
»2038 | WD Flows | AM
»2038 | WD Flows | PM
»2028 | 2a WD Flows | AM
»2028 | 2a WD Flows | PM
»2038 | 2a WD Flows | AM
»2038 | 2a WD Flows | PM

Summary of junction performance

	AM								PM							
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2022 - Observed																
Stream B-C	D1	0.0	6.14	0.01	A	0.67	A	114 % [Stream B-A]	D2	0.0	6.42	0.02	A	0.43	A	147 % [Stream B-A]
Stream B-A		0.2	8.25	0.14	A					0.1	7.54	0.06	A			
Stream C-AB		0.0	4.07	0.02	A					0.0	4.85	0.03	A			
2028 - 2a WD Flows																
Stream B-C	D11	0.0	6.75	0.01	A	1.40	A	43 % [Stream B-A]	D12	0.0	7.51	0.03	A	0.49	A	68 % [Stream B-A]
Stream B-A		0.5	12.52	0.34	B					0.1	10.08	0.10	B			
Stream C-AB		0.0	3.57	0.03	A					0.1	4.96	0.05	A			
2028 - WD Flows																
Stream B-C	D5	0.0	6.74	0.01	A	1.45	A	39 % [Stream B-A]	D6	0.0	7.34	0.03	A	0.51	A	74 % [Stream B-A]
Stream B-A		0.6	13.05	0.36	B					0.1	9.72	0.10	A			
Stream C-AB		0.0	3.45	0.03	A					0.1	5.00	0.05	A			
2028 - WoD Flows																
Stream B-C	D3	0.0	6.51	0.02	A	1.01	A	65 % [Stream B-A]	D4	0.0	6.75	0.02	A	0.47	A	100 % [Stream B-A]
Stream B-A		0.3	10.36	0.24	B					0.1	8.63	0.08	A			
Stream C-AB		0.0	3.89	0.02	A					0.1	4.75	0.04	A			
2038 - 2a WD Flows																
Stream B-C	D13	0.0	7.55	0.02	A	1.81	A	25 % [Stream B-A]	D14	0.0	8.54	0.04	A	0.61	A	35 % [Stream B-A]
Stream B-A		0.8	15.93	0.44	C					0.2	13.58	0.16	B			
Stream C-AB		0.0	3.40	0.02	A					0.1	4.85	0.06	A			
2038 - WD Flows																
Stream B-C	D9	0.0	7.79	0.03	A	2.08	A	22 % [Stream B-A]	D10	0.0	8.44	0.04	A	0.64	A	36 % [Stream B-A]
Stream B-A		0.9	16.82	0.47	C					0.2	13.42	0.17	B			
Stream C-AB		0.1	3.48	0.04	A					0.1	4.82	0.06	A			
2038 - WoD Flows																
Stream B-C	D7	0.0	7.27	0.03	A	1.32	A	40 % [Stream B-A]	D8	0.0	7.36	0.03	A	0.70	A	52 % [Stream B-A]
Stream B-A		0.5	12.77	0.33	B					0.2	11.35	0.17	B			
Stream C-AB		0.0	3.88	0.02	A					0.1	4.29	0.06	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	East Midlands Gateway Phase 2
Location	A453/Grimes Gate
Site number	
Date	06/01/2023
Version	
Status	(new file)
Identifier	
Client	SEGRO
Jobnumber	220500
Enumerator	BWB\matt.corner
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	Observed	AM	ONE HOUR	08:00	09:30	15
D2	2022	Observed	PM	ONE HOUR	17:00	18:30	15
D3	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15
D4	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15
D5	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15
D6	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15
D7	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15
D8	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15
D9	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15
D10	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15
D11	2028	2a WD Flows	AM	ONE HOUR	08:00	09:30	15
D12	2028	2a WD Flows	PM	ONE HOUR	17:00	18:30	15
D13	2038	2a WD Flows	AM	ONE HOUR	08:00	09:30	15
D14	2038	2a WD Flows	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022 | Observed | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.67	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	114	Stream B-A	0.67	A

Arms

Arms

Arm	Name	Description	Arm type
A	A453 (E)		Major
B	Grimes Gate		Minor
C	A453 (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.80			190.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	8.25	7.50	7.40	4.30	3.80		1.00	215	153

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	732	0.123	0.311	0.195	0.444
B-C	700	0.099	0.250	-	-
C-B	684	0.244	0.244	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	Observed	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	316	100.000
B		✓	70	100.000
C		✓	554	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	20	296
	B	64	0	6
	C	547	7	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.14	0.0	A
B-A	0.14	8.25	0.2	A
C-AB	0.02	4.07	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	629	0.007	4	0.0	5.764	A
B-A	48	0.00	578	0.083	48	0.1	6.784	A
C-AB	10	0.00	895	0.011	10	0.0	4.068	A
C-A	407	0.00			407			
A-B	15	0.00			15			
A-C	223	0.00			223			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	614	0.009	5	0.0	5.912	A
B-A	58	0.00	548	0.105	57	0.1	7.332	A
C-AB	13	0.00	938	0.014	13	0.0	3.890	A
C-A	485	0.00			485			
A-B	18	0.00			18			
A-C	266	0.00			266			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	593	0.011	7	0.0	6.137	A
B-A	70	0.00	507	0.139	70	0.2	8.241	A
C-AB	19	0.00	1001	0.019	19	0.0	3.667	A
C-A	591	0.00			591			
A-B	22	0.00			22			
A-C	326	0.00			326			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	593	0.011	7	0.0	6.137	A
B-A	70	0.00	507	0.139	70	0.2	8.248	A
C-AB	19	0.00	1001	0.019	19	0.0	3.667	A
C-A	591	0.00			591			
A-B	22	0.00			22			
A-C	326	0.00			326			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	614	0.009	5	0.0	5.913	A
B-A	58	0.00	548	0.105	58	0.1	7.341	A
C-AB	13	0.00	938	0.014	13	0.0	3.892	A
C-A	485	0.00			485			
A-B	18	0.00			18			
A-C	266	0.00			266			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	629	0.007	5	0.0	5.768	A
B-A	48	0.00	578	0.083	48	0.1	6.795	A
C-AB	10	0.00	895	0.011	10	0.0	4.068	A
C-A	407	0.00			407			
A-B	15	0.00			15			
A-C	223	0.00			223			

2022 | Observed | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.43	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	147	Stream B-A	0.43	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2022	Observed	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	482	100.000
B		✓	37	100.000
C		✓	330	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	74	408
	B	28	0	9
	C	318	12	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	6.42	0.0	A
B-A	0.06	7.54	0.1	A
C-AB	0.03	4.85	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	612	0.011	7	0.0	5.948	A
B-A	21	0.00	579	0.036	21	0.0	6.450	A
C-AB	13	0.00	756	0.018	13	0.0	4.848	A
C-A	235	0.00			235			
A-B	56	0.00			56			
A-C	307	0.00			307			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	595	0.014	8	0.0	6.137	A
B-A	25	0.00	549	0.046	25	0.0	6.869	A
C-AB	17	0.00	772	0.022	17	0.0	4.767	A
C-A	280	0.00			280			
A-B	67	0.00			67			
A-C	367	0.00			367			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	571	0.017	10	0.0	6.420	A
B-A	31	0.00	508	0.061	31	0.1	7.541	A
C-AB	24	0.00	797	0.030	24	0.0	4.656	A
C-A	340	0.00			340			
A-B	81	0.00			81			
A-C	449	0.00			449			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	571	0.017	10	0.0	6.420	A
B-A	31	0.00	508	0.061	31	0.1	7.541	A
C-AB	24	0.00	797	0.030	24	0.0	4.656	A
C-A	340	0.00			340			
A-B	81	0.00			81			
A-C	449	0.00			449			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	595	0.014	8	0.0	6.140	A
B-A	25	0.00	549	0.046	25	0.0	6.871	A
C-AB	17	0.00	772	0.022	17	0.0	4.769	A
C-A	279	0.00			279			
A-B	67	0.00			67			
A-C	367	0.00			367			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	612	0.011	7	0.0	5.951	A
B-A	21	0.00	579	0.036	21	0.0	6.456	A
C-AB	13	0.00	756	0.018	13	0.0	4.849	A
C-A	235	0.00			235			
A-B	56	0.00			56			
A-C	307	0.00			307			

2028 | WoD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		1.01	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	65	Stream B-A	1.01	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	353	100.000
B		✓	109	100.000
C		✓	704	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	21	332
	B	101	0	8
	C	697	7	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	12
	B	1	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	6.51	0.0	A
B-A	0.24	10.36	0.3	B
C-AB	0.02	3.89	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	0.00	612	0.010	6	0.0	5.938	A
B-A	76	0.00	548	0.139	75	0.2	7.692	A
C-AB	12	0.00	963	0.012	12	0.0	3.882	A
C-A	518	0.00			518			
A-B	16	0.00			16			
A-C	250	0.00			250			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	592	0.012	7	0.0	6.151	A
B-A	91	0.00	512	0.177	91	0.2	8.629	A
C-AB	16	0.00	1022	0.016	16	0.0	3.681	A
C-A	617	0.00			617			
A-B	19	0.00			19			
A-C	298	0.00			298			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	0.00	562	0.016	9	0.0	6.509	A
B-A	111	0.00	462	0.241	111	0.3	10.337	B
C-AB	25	0.00	1105	0.023	25	0.0	3.440	A
C-A	750	0.00			750			
A-B	23	0.00			23			
A-C	366	0.00			366			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	0.00	562	0.016	9	0.0	6.512	A
B-A	111	0.00	462	0.241	111	0.3	10.359	B
C-AB	25	0.00	1105	0.023	25	0.0	3.446	A
C-A	750	0.00			750			
A-B	23	0.00			23			
A-C	366	0.00			366			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	592	0.012	7	0.0	6.154	A
B-A	91	0.00	512	0.177	91	0.2	8.654	A
C-AB	16	0.00	1022	0.016	16	0.0	3.698	A
C-A	617	0.00			617			
A-B	19	0.00			19			
A-C	298	0.00			298			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	0.00	612	0.010	6	0.0	5.941	A
B-A	76	0.00	547	0.139	76	0.2	7.720	A
C-AB	12	0.00	963	0.012	12	0.0	3.891	A
C-A	518	0.00			518			
A-B	16	0.00			16			
A-C	250	0.00			250			

2028 | WoD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.47	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	100	Stream B-A	0.47	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	575	100.000
B		✓	45	100.000
C		✓	439	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	90	485
	B	35	0	10
	C	425	14	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	2	9
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	6.75	0.0	A
B-A	0.08	8.63	0.1	A
C-AB	0.04	4.75	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	595	0.013	7	0.0	6.132	A
B-A	26	0.00	543	0.049	26	0.1	6.965	A
C-AB	18	0.00	795	0.022	18	0.0	4.735	A
C-A	313	0.00			313			
A-B	68	0.00			68			
A-C	365	0.00			365			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	0.00	574	0.016	9	0.0	6.375	A
B-A	31	0.00	506	0.062	31	0.1	7.580	A
C-AB	24	0.00	821	0.029	24	0.0	4.626	A
C-A	371	0.00			371			
A-B	81	0.00			81			
A-C	436	0.00			436			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	544	0.020	11	0.0	6.748	A
B-A	39	0.00	456	0.085	38	0.1	8.627	A
C-AB	34	0.00	860	0.039	34	0.1	4.489	A
C-A	449	0.00			449			
A-B	99	0.00			99			
A-C	534	0.00			534			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	544	0.020	11	0.0	6.748	A
B-A	39	0.00	456	0.085	39	0.1	8.631	A
C-AB	34	0.00	860	0.039	34	0.1	4.498	A
C-A	449	0.00			449			
A-B	99	0.00			99			
A-C	534	0.00			534			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	0.00	574	0.016	9	0.0	6.378	A
B-A	31	0.00	506	0.062	32	0.1	7.583	A
C-AB	24	0.00	822	0.029	24	0.0	4.648	A
C-A	371	0.00			371			
A-B	81	0.00			81			
A-C	436	0.00			436			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	594	0.013	8	0.0	6.133	A
B-A	26	0.00	543	0.049	26	0.1	6.971	A
C-AB	18	0.00	795	0.022	18	0.0	4.747	A
C-A	313	0.00			313			
A-B	68	0.00			68			
A-C	365	0.00			365			

2028 | WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		1.45	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	39	Stream B-A	1.45	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	285	100.000
B		✓	149	100.000
C		✓	933	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	19	266
	B	143	0	6
	C	927	6	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	14
	B	1	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.74	0.0	A
B-A	0.36	13.05	0.6	B
C-AB	0.03	3.45	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	610	0.007	4	0.0	5.940	A
B-A	108	0.00	530	0.203	107	0.3	8.575	A
C-AB	13	0.00	1085	0.012	13	0.0	3.442	A
C-A	690	0.00			690			
A-B	14	0.00			14			
A-C	200	0.00			200			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	586	0.009	5	0.0	6.204	A
B-A	129	0.00	490	0.262	128	0.4	10.027	B
C-AB	19	0.00	1167	0.016	19	0.0	3.219	A
C-A	820	0.00			820			
A-B	17	0.00			17			
A-C	239	0.00			239			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	541	0.012	7	0.0	6.735	A
B-A	157	0.00	436	0.361	157	0.6	12.974	B
C-AB	32	0.00	1284	0.025	32	0.0	2.963	A
C-A	995	0.00			995			
A-B	21	0.00			21			
A-C	293	0.00			293			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	540	0.012	7	0.0	6.744	A
B-A	157	0.00	436	0.361	157	0.6	13.048	B
C-AB	32	0.00	1284	0.025	32	0.0	2.969	A
C-A	995	0.00			995			
A-B	21	0.00			21			
A-C	293	0.00			293			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	585	0.009	5	0.0	6.212	A
B-A	129	0.00	490	0.262	129	0.4	10.096	B
C-AB	19	0.00	1167	0.016	19	0.0	3.232	A
C-A	820	0.00			820			
A-B	17	0.00			17			
A-C	239	0.00			239			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	610	0.007	5	0.0	5.949	A
B-A	108	0.00	530	0.203	108	0.3	8.633	A
C-AB	13	0.00	1085	0.012	13	0.0	3.451	A
C-A	690	0.00			690			
A-B	14	0.00			14			
A-C	200	0.00			200			

2028 | WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.51	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	74	Stream B-A	0.51	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	746	100.000
B		✓	49	100.000
C		✓	411	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	133	613
	B	37	0	12
	C	394	17	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	2	4
	B	0	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	7.34	0.0	A
B-A	0.10	9.72	0.1	A
C-AB	0.05	5.00	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	0.00	567	0.016	9	0.0	6.454	A
B-A	28	0.00	513	0.054	28	0.1	7.418	A
C-AB	21	0.00	753	0.028	21	0.0	4.991	A
C-A	288	0.00			288			
A-B	100	0.00			100			
A-C	461	0.00			461			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	540	0.020	11	0.0	6.797	A
B-A	33	0.00	470	0.071	33	0.1	8.239	A
C-AB	28	0.00	772	0.037	28	0.1	4.921	A
C-A	341	0.00			341			
A-B	120	0.00			120			
A-C	551	0.00			551			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	503	0.026	13	0.0	7.344	A
B-A	41	0.00	411	0.099	41	0.1	9.711	A
C-AB	41	0.00	801	0.051	41	0.1	4.832	A
C-A	412	0.00			412			
A-B	146	0.00			146			
A-C	675	0.00			675			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	503	0.026	13	0.0	7.344	A
B-A	41	0.00	411	0.099	41	0.1	9.718	A
C-AB	41	0.00	801	0.051	41	0.1	4.842	A
C-A	411	0.00			411			
A-B	146	0.00			146			
A-C	675	0.00			675			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	540	0.020	11	0.0	6.799	A
B-A	33	0.00	470	0.071	33	0.1	8.248	A
C-AB	28	0.00	772	0.037	28	0.1	4.940	A
C-A	341	0.00			341			
A-B	120	0.00			120			
A-C	551	0.00			551			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	0.00	567	0.016	9	0.0	6.458	A
B-A	28	0.00	513	0.054	28	0.1	7.427	A
C-AB	21	0.00	753	0.028	21	0.0	5.000	A
C-A	288	0.00			288			
A-B	100	0.00			100			
A-C	461	0.00			461			

2038 | WoD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		1.32	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	40	Stream B-A	1.32	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	465	100.000
B		✓	138	100.000
C		✓	731	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	23	442
	B	124	0	14
	C	724	7	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	7.27	0.0	A
B-A	0.33	12.77	0.5	B
C-AB	0.02	3.88	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	584	0.018	10	0.0	6.276	A
B-A	93	0.00	518	0.180	92	0.2	8.451	A
C-AB	12	0.00	962	0.013	12	0.0	3.872	A
C-A	538	0.00			538			
A-B	17	0.00			17			
A-C	333	0.00			333			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	556	0.023	13	0.0	6.620	A
B-A	111	0.00	476	0.234	111	0.3	9.858	A
C-AB	17	0.00	1022	0.017	17	0.0	3.666	A
C-A	640	0.00			640			
A-B	21	0.00			21			
A-C	397	0.00			397			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	0.00	511	0.030	15	0.0	7.266	A
B-A	137	0.00	418	0.326	136	0.5	12.708	B
C-AB	28	0.00	1109	0.025	27	0.0	3.419	A
C-A	777	0.00			777			
A-B	25	0.00			25			
A-C	487	0.00			487			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	0.00	510	0.030	15	0.0	7.273	A
B-A	137	0.00	418	0.326	137	0.5	12.769	B
C-AB	28	0.00	1109	0.025	28	0.0	3.424	A
C-A	777	0.00			777			
A-B	25	0.00			25			
A-C	487	0.00			487			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	556	0.023	13	0.0	6.627	A
B-A	111	0.00	476	0.234	112	0.3	9.913	A
C-AB	17	0.00	1022	0.017	17	0.0	3.681	A
C-A	640	0.00			640			
A-B	21	0.00			21			
A-C	397	0.00			397			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	584	0.018	11	0.0	6.284	A
B-A	93	0.00	518	0.180	94	0.2	8.501	A
C-AB	12	0.00	962	0.013	12	0.0	3.879	A
C-A	538	0.00			538			
A-B	17	0.00			17			
A-C	333	0.00			333			

2038 | WoD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.70	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	52	Stream B-A	0.70	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	676	100.000
B		✓	74	100.000
C		✓	620	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	99	577
	B	60	0	14
	C	604	16	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	2	4
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	7.36	0.0	A
B-A	0.17	11.35	0.2	B
C-AB	0.06	4.29	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	570	0.018	10	0.0	6.432	A
B-A	45	0.00	494	0.092	45	0.1	8.012	A
C-AB	25	0.00	873	0.029	25	0.0	4.289	A
C-A	442	0.00			442			
A-B	75	0.00			75			
A-C	434	0.00			434			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	543	0.023	13	0.0	6.780	A
B-A	54	0.00	447	0.121	54	0.1	9.144	A
C-AB	35	0.00	917	0.039	35	0.1	4.128	A
C-A	522	0.00			522			
A-B	89	0.00			89			
A-C	519	0.00			519			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	0.00	505	0.031	15	0.0	7.354	A
B-A	66	0.00	383	0.172	66	0.2	11.324	B
C-AB	55	0.00	982	0.056	55	0.1	3.932	A
C-A	628	0.00			628			
A-B	109	0.00			109			
A-C	635	0.00			635			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	0.00	505	0.031	15	0.0	7.356	A
B-A	66	0.00	383	0.172	66	0.2	11.345	B
C-AB	55	0.00	982	0.056	55	0.1	3.936	A
C-A	628	0.00			628			
A-B	109	0.00			109			
A-C	635	0.00			635			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	543	0.023	13	0.0	6.785	A
B-A	54	0.00	447	0.121	54	0.1	9.165	A
C-AB	35	0.00	917	0.039	36	0.1	4.138	A
C-A	522	0.00			522			
A-B	89	0.00			89			
A-C	519	0.00			519			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	570	0.018	11	0.0	6.434	A
B-A	45	0.00	494	0.092	45	0.1	8.032	A
C-AB	25	0.00	873	0.029	25	0.0	4.294	A
C-A	442	0.00			442			
A-B	75	0.00			75			
A-C	434	0.00			434			

2038 | WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		2.08	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	22	Stream B-A	2.08	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	375	100.000
B		✓	184	100.000
C		✓	945	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	33	342
	B	173	0	11
	C	935	10	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	7.79	0.0	A
B-A	0.47	16.82	0.9	C
C-AB	0.04	3.48	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	583	0.014	8	0.0	6.263	A
B-A	130	0.00	508	0.256	129	0.3	9.461	A
C-AB	22	0.00	1078	0.020	22	0.0	3.471	A
C-A	690	0.00			690			
A-B	25	0.00			25			
A-C	257	0.00			257			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	547	0.018	10	0.0	6.703	A
B-A	156	0.00	465	0.335	155	0.5	11.604	B
C-AB	33	0.00	1161	0.028	33	0.0	3.254	A
C-A	817	0.00			817			
A-B	30	0.00			30			
A-C	307	0.00			307			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	0.00	476	0.025	12	0.0	7.764	A
B-A	190	0.00	404	0.471	189	0.9	16.603	C
C-AB	57	0.00	1279	0.044	56	0.1	3.011	A
C-A	984	0.00			984			
A-B	36	0.00			36			
A-C	377	0.00			377			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	0.00	474	0.026	12	0.0	7.794	A
B-A	190	0.00	404	0.471	190	0.9	16.815	C
C-AB	57	0.00	1279	0.044	57	0.1	3.017	A
C-A	984	0.00			984			
A-B	36	0.00			36			
A-C	377	0.00			377			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	545	0.018	10	0.0	6.727	A
B-A	156	0.00	464	0.335	157	0.5	11.762	B
C-AB	33	0.00	1161	0.028	33	0.0	3.263	A
C-A	817	0.00			817			
A-B	30	0.00			30			
A-C	307	0.00			307			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	582	0.014	8	0.0	6.278	A
B-A	130	0.00	508	0.256	131	0.3	9.562	A
C-AB	22	0.00	1079	0.020	22	0.0	3.476	A
C-A	690	0.00			690			
A-B	25	0.00			25			
A-C	257	0.00			257			

2038 | WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.64	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	36	Stream B-A	0.64	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	944	100.000
B		✓	64	100.000
C		✓	525	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	149	795
	B	49	0	15
	C	508	17	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	1	3
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.04	8.44	0.0	A
B-A	0.17	13.42	0.2	B
C-AB	0.06	4.82	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	528	0.021	11	0.0	6.967	A
B-A	37	0.00	452	0.082	37	0.1	8.661	A
C-AB	25	0.00	784	0.032	25	0.0	4.808	A
C-A	370	0.00			370			
A-B	112	0.00			112			
A-C	599	0.00			599			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	493	0.027	13	0.0	7.503	A
B-A	44	0.00	397	0.111	44	0.1	10.178	B
C-AB	35	0.00	813	0.043	35	0.1	4.702	A
C-A	437	0.00			437			
A-B	134	0.00			134			
A-C	715	0.00			715			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	0.00	443	0.037	16	0.0	8.432	A
B-A	54	0.00	322	0.167	54	0.2	13.390	B
C-AB	54	0.00	856	0.063	54	0.1	4.572	A
C-A	524	0.00			524			
A-B	164	0.00			164			
A-C	875	0.00			875			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	0.00	443	0.037	17	0.0	8.437	A
B-A	54	0.00	322	0.167	54	0.2	13.421	B
C-AB	54	0.00	856	0.063	54	0.1	4.579	A
C-A	524	0.00			524			
A-B	164	0.00			164			
A-C	875	0.00			875			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	493	0.027	14	0.0	7.507	A
B-A	44	0.00	397	0.111	44	0.1	10.207	B
C-AB	35	0.00	813	0.043	35	0.1	4.719	A
C-A	437	0.00			437			
A-B	134	0.00			134			
A-C	715	0.00			715			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	528	0.021	11	0.0	6.973	A
B-A	37	0.00	452	0.082	37	0.1	8.682	A
C-AB	25	0.00	785	0.032	25	0.0	4.818	A
C-A	370	0.00			370			
A-B	112	0.00			112			
A-C	599	0.00			599			

2028 | 2a WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		1.40	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	43	Stream B-A	1.40	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2028	2a WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	313	100.000
B		✓	144	100.000
C		✓	865	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	21	292
	B	137	0	7
	C	858	7	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	13
	B	1	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.75	0.0	A
B-A	0.34	12.52	0.5	B
C-AB	0.03	3.57	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	608	0.009	5	0.0	5.972	A
B-A	103	0.00	533	0.193	102	0.2	8.418	A
C-AB	14	0.00	1048	0.013	14	0.0	3.565	A
C-A	637	0.00			637			
A-B	16	0.00			16			
A-C	220	0.00			220			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	0.00	584	0.011	6	0.0	6.234	A
B-A	123	0.00	495	0.249	123	0.3	9.769	A
C-AB	20	0.00	1123	0.018	20	0.0	3.348	A
C-A	757	0.00			757			
A-B	19	0.00			19			
A-C	263	0.00			263			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	542	0.014	8	0.0	6.741	A
B-A	151	0.00	441	0.342	150	0.5	12.457	B
C-AB	33	0.00	1230	0.027	33	0.0	3.096	A
C-A	919	0.00			919			
A-B	23	0.00			23			
A-C	321	0.00			321			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	541	0.014	8	0.0	6.748	A
B-A	151	0.00	441	0.342	151	0.5	12.519	B
C-AB	33	0.00	1230	0.027	33	0.0	3.102	A
C-A	919	0.00			919			
A-B	23	0.00			23			
A-C	321	0.00			321			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	0.00	583	0.011	6	0.0	6.241	A
B-A	123	0.00	495	0.249	124	0.3	9.827	A
C-AB	20	0.00	1123	0.018	20	0.0	3.359	A
C-A	757	0.00			757			
A-B	19	0.00			19			
A-C	263	0.00			263			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	607	0.009	5	0.0	5.980	A
B-A	103	0.00	533	0.193	104	0.2	8.471	A
C-AB	14	0.00	1048	0.013	14	0.0	3.572	A
C-A	637	0.00			637			
A-B	16	0.00			16			
A-C	220	0.00			220			

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.49	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	68	Stream B-A	0.49	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2028	2a WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	769	100.000
B		✓	48	100.000
C		✓	426	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	111	658
	B	35	0	13
	C	410	16	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	2	4
	B	0	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	7.51	0.0	A
B-A	0.10	10.08	0.1	B
C-AB	0.05	4.96	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	560	0.017	10	0.0	6.539	A
B-A	26	0.00	502	0.052	26	0.1	7.558	A
C-AB	20	0.00	758	0.027	20	0.0	4.955	A
C-A	300	0.00			300			
A-B	84	0.00			84			
A-C	495	0.00			495			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	0.00	533	0.022	12	0.0	6.910	A
B-A	31	0.00	458	0.069	31	0.1	8.447	A
C-AB	27	0.00	778	0.035	27	0.0	4.877	A
C-A	356	0.00			356			
A-B	100	0.00			100			
A-C	592	0.00			592			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	0.00	494	0.029	14	0.0	7.506	A
B-A	39	0.00	396	0.097	38	0.1	10.069	B
C-AB	40	0.00	809	0.049	40	0.1	4.777	A
C-A	429	0.00			429			
A-B	122	0.00			122			
A-C	724	0.00			724			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	0.00	494	0.029	14	0.0	7.507	A
B-A	39	0.00	396	0.097	39	0.1	10.076	B
C-AB	40	0.00	809	0.049	40	0.1	4.786	A
C-A	429	0.00			429			
A-B	122	0.00			122			
A-C	724	0.00			724			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	0.00	533	0.022	12	0.0	6.914	A
B-A	31	0.00	457	0.069	32	0.1	8.455	A
C-AB	27	0.00	778	0.035	28	0.0	4.896	A
C-A	356	0.00			356			
A-B	100	0.00			100			
A-C	592	0.00			592			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	560	0.017	10	0.0	6.540	A
B-A	26	0.00	502	0.052	26	0.1	7.568	A
C-AB	20	0.00	758	0.027	20	0.0	4.965	A
C-A	300	0.00			300			
A-B	84	0.00			84			
A-C	495	0.00			495			

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		1.81	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	25	Stream B-A	1.81	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2038	2a WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	363	100.000
B		✓	172	100.000
C		✓	957	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	11	352
	B	161	0	11
	C	953	4	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	7.55	0.0	A
B-A	0.44	15.93	0.8	C
C-AB	0.02	3.40	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	587	0.014	8	0.0	6.217	A
B-A	121	0.00	507	0.239	120	0.3	9.270	A
C-AB	9	0.00	1089	0.008	9	0.0	3.398	A
C-A	712	0.00			712			
A-B	8	0.00			8			
A-C	265	0.00			265			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	554	0.018	10	0.0	6.616	A
B-A	145	0.00	463	0.312	144	0.4	11.258	B
C-AB	13	0.00	1173	0.011	13	0.0	3.167	A
C-A	847	0.00			847			
A-B	10	0.00			10			
A-C	316	0.00			316			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	0.00	490	0.025	12	0.0	7.530	A
B-A	177	0.00	403	0.440	176	0.8	15.768	C
C-AB	23	0.00	1294	0.018	23	0.0	2.898	A
C-A	1030	0.00			1030			
A-B	12	0.00			12			
A-C	388	0.00			388			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	0.00	489	0.025	12	0.0	7.552	A
B-A	177	0.00	403	0.440	177	0.8	15.935	C
C-AB	23	0.00	1294	0.018	23	0.0	2.901	A
C-A	1030	0.00			1030			
A-B	12	0.00			12			
A-C	388	0.00			388			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	553	0.018	10	0.0	6.634	A
B-A	145	0.00	463	0.312	146	0.5	11.384	B
C-AB	13	0.00	1173	0.011	13	0.0	3.177	A
C-A	847	0.00			847			
A-B	10	0.00			10			
A-C	316	0.00			316			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	586	0.014	8	0.0	6.230	A
B-A	121	0.00	507	0.239	122	0.3	9.359	A
C-AB	9	0.00	1089	0.008	9	0.0	3.402	A
C-A	712	0.00			712			
A-B	8	0.00			8			
A-C	265	0.00			265			

2038 | 2a WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.61	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	35	Stream B-A	0.61	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2038	2a WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	970	100.000
B		✓	61	100.000
C		✓	518	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	152	818
	B	46	0	15
	C	502	16	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	1	3
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.04	8.54	0.0	A
B-A	0.16	13.58	0.2	B
C-AB	0.06	4.85	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	524	0.022	11	0.0	7.020	A
B-A	35	0.00	447	0.077	34	0.1	8.706	A
C-AB	23	0.00	777	0.030	23	0.0	4.843	A
C-A	367	0.00			367			
A-B	114	0.00			114			
A-C	616	0.00			616			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	489	0.028	13	0.0	7.575	A
B-A	41	0.00	392	0.105	41	0.1	10.259	B
C-AB	33	0.00	804	0.041	33	0.1	4.739	A
C-A	433	0.00			433			
A-B	137	0.00			137			
A-C	735	0.00			735			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	0.00	438	0.038	16	0.0	8.539	A
B-A	51	0.00	316	0.160	50	0.2	13.550	B
C-AB	51	0.00	846	0.060	51	0.1	4.610	A
C-A	519	0.00			519			
A-B	167	0.00			167			
A-C	901	0.00			901			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	0.00	438	0.038	17	0.0	8.543	A
B-A	51	0.00	316	0.160	51	0.2	13.582	B
C-AB	51	0.00	846	0.060	51	0.1	4.619	A
C-A	519	0.00			519			
A-B	167	0.00			167			
A-C	901	0.00			901			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	489	0.028	14	0.0	7.581	A
B-A	41	0.00	392	0.105	42	0.1	10.280	B
C-AB	33	0.00	804	0.041	33	0.1	4.756	A
C-A	433	0.00			433			
A-B	137	0.00			137			
A-C	735	0.00			735			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	524	0.022	11	0.0	7.022	A
B-A	35	0.00	447	0.077	35	0.1	8.729	A
C-AB	24	0.00	777	0.030	24	0.0	4.853	A
C-A	366	0.00			366			
A-B	114	0.00			114			
A-C	616	0.00			616			

APPENDIX 53: Junction 8: A453/The Green Priority Junction Stage 1A/2A Modelling Results

Junctions 11

PICADY 11 - Priority Intersection Module

Version: 11.0.0.2177
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Filename: 250619_A453_The Green_Stage 1a+2a.j11
Path: J:\2022\220500-East Midlands Gateway Phase 2 (1)\ProjectDelivery\01-WIP\DesignAndCalculations\T&I Planning\Traffic Models\8. A453_The Green Junction
Report generation date: 20/06/2025 16:00:32

»2028 | WoD Flows | AM
»2028 | WoD Flows | PM
»2028 | WD Flows | AM
»2028 | WD Flows | PM
»2038 | WoD Flows | AM
»2038 | WoD Flows | PM
»2038 | WD Flows | AM
»2038 | WD Flows | PM
»2028 | 2a WD Flows | AM
»2028 | 2a WD Flows | PM
»2038 | 2a WD Flows | AM
»2038 | 2a WD Flows | PM

Summary of junction performance

	AM								PM							
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2028 - 2a WD Flows																
Stream B-AC	D9	40.2	243.49	1.13	F	82.07	F	-21 % [Stream B-AC]	D10	1.2	20.55	0.56	C	4.72	A	14 % [Stream B-AC]
Stream C-AB		0.7	4.53	0.24	A					1.1	8.27	0.42	A			
2028 - WD Flows																
Stream B-AC	D3	122.9	800.13	1.39	F	313.52	F	-33 % [Stream B-AC]	D4	1.1	17.92	0.53	C	3.97	A	20 % [Stream B-AC]
Stream C-AB		0.6	4.58	0.24	A					0.6	6.78	0.30	A			
2028 - WoD Flows																
Stream B-AC	D1	5.9	49.47	0.88	E	15.37	C	-5 % [Stream B-AC]	D2	1.0	14.84	0.50	B	3.65	A	30 % [Stream B-AC]
Stream C-AB		0.7	4.88	0.25	A					0.5	5.92	0.25	A			
2038 - 2a WD Flows																
Stream B-AC	D11	72.9	505.43	1.28	F	163.77	F	-28 % [Stream B-AC]	D12	25.2	276.97	1.18	F	88.90	F	-16 % [Stream B-AC]
Stream C-AB		0.7	4.37	0.22	A					31.0	129.44	1.03	F			
2038 - WD Flows																
Stream B-AC	D7	172.0	1153.41	1.54	F	428.30	F	-37 % [Stream B-AC]	D8	28.8	321.69	1.26	F	128.11	F	-16 % [Stream B-AC]
Stream C-AB		1.2	5.76	0.39	A					53.0	204.22	1.11	F			
2038 - WoD Flows																
Stream B-AC	D5	6.1	56.79	0.88	F	15.05	C	-7 % [Stream B-AC]	D6	5.3	60.80	0.87	F	21.04	C	-7 % [Stream B-AC]
Stream C-AB		1.2	5.92	0.38	A					7.9	26.89	0.85	D			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	East Midlands Gateway Phase 2
Location	A453/The Green T-Junction
Site number	
Date	06/01/2023
Version	
Status	(new file)
Identifier	
Client	SEGRO
Jobnumber	220500
Enumerator	BWB\matt.corner
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15
D2	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15
D3	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15
D4	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15
D5	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15
D6	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15
D7	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15
D8	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15
D9	2028	2a WD Flows	AM	ONE HOUR	08:00	09:30	15
D10	2028	2a WD Flows	PM	ONE HOUR	17:00	18:30	15
D11	2038	2a WD Flows	AM	ONE HOUR	08:00	09:30	15
D12	2038	2a WD Flows	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2028 | WoD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		15.37	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-5	Stream B-AC	15.37	C

Arms

Arms

Arm	Name	Description	Arm type
A	A453 (E)		Major
B	The Green		Minor
C	A453 (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.00			250.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.60	119	135

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	621	0.108	0.273	0.172	0.390
B-C	752	0.110	0.279	-	-
C-B	719	0.266	0.266	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	338	100.000
B		✓	418	100.000
C		✓	653	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	33	305
	B	141	0	277
	C	562	91	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	13
	B	1	0	0
	C	6	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.88	49.47	5.9	E
C-AB	0.25	4.88	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	315	0.00	586	0.537	310	1.1	12.918	B
C-AB	127	0.00	921	0.138	126	0.3	4.696	A
C-A	365	0.00			365			
A-B	25	0.00			25			
A-C	230	0.00			230			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	376	0.00	561	0.670	373	1.9	18.859	C
C-AB	173	0.00	964	0.179	172	0.4	4.729	A
C-A	414	0.00			414			
A-B	30	0.00			30			
A-C	274	0.00			274			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	460	0.00	525	0.876	447	5.2	40.535	E
C-AB	254	0.00	1026	0.248	253	0.6	4.864	A
C-A	465	0.00			465			
A-B	36	0.00			36			
A-C	336	0.00			336			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	460	0.00	525	0.876	458	5.9	49.466	E
C-AB	254	0.00	1026	0.248	254	0.7	4.882	A
C-A	465	0.00			465			
A-B	36	0.00			36			
A-C	336	0.00			336			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	376	0.00	561	0.670	391	2.2	22.834	C
C-AB	173	0.00	965	0.179	174	0.4	4.761	A
C-A	414	0.00			414			
A-B	30	0.00			30			
A-C	274	0.00			274			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	315	0.00	585	0.538	319	1.2	13.729	B
C-AB	127	0.00	922	0.138	128	0.3	4.725	A
C-A	364	0.00			364			
A-B	25	0.00			25			
A-C	230	0.00			230			

2028 | WoD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		3.65	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	30	Stream B-AC	3.65	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	492	100.000
B		✓	217	100.000
C		✓	452	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	31	461
	B	87	0	130
	C	351	101	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	9
	B	0	0	0
	C	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.50	14.84	1.0	B
C-AB	0.25	5.92	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	163	0.00	552	0.296	162	0.4	9.196	A
C-AB	114	0.00	793	0.144	113	0.2	5.422	A
C-A	226	0.00			226			
A-B	23	0.00			23			
A-C	347	0.00			347			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	195	0.00	523	0.373	194	0.6	10.949	B
C-AB	149	0.00	811	0.184	149	0.3	5.585	A
C-A	257	0.00			257			
A-B	28	0.00			28			
A-C	414	0.00			414			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	239	0.00	481	0.496	237	1.0	14.668	B
C-AB	207	0.00	838	0.247	206	0.5	5.892	A
C-A	290	0.00			290			
A-B	34	0.00			34			
A-C	508	0.00			508			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	239	0.00	481	0.496	239	1.0	14.844	B
C-AB	208	0.00	838	0.248	207	0.5	5.924	A
C-A	290	0.00			290			
A-B	34	0.00			34			
A-C	508	0.00			508			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	195	0.00	522	0.374	197	0.6	11.100	B
C-AB	149	0.00	812	0.184	150	0.4	5.639	A
C-A	257	0.00			257			
A-B	28	0.00			28			
A-C	414	0.00			414			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	163	0.00	551	0.296	164	0.4	9.315	A
C-AB	114	0.00	794	0.144	115	0.3	5.464	A
C-A	226	0.00			226			
A-B	23	0.00			23			
A-C	347	0.00			347			

2028 | WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		313.52	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-33	Stream B-AC	313.52	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	273	100.000
B		✓	625	100.000
C		✓	700	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	41	232
	B	319	0	306
	C	614	86	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	16
	B	0	0	0
	C	5	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.39	800.13	122.9	F
C-AB	0.24	4.58	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	471	0.00	556	0.846	453	4.4	31.029	D
C-AB	125	0.00	956	0.131	124	0.3	4.478	A
C-A	402	0.00			402			
A-B	31	0.00			31			
A-C	175	0.00			175			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	562	0.00	530	1.059	511	17.2	95.975	F
C-AB	172	0.00	1005	0.171	172	0.4	4.476	A
C-A	457	0.00			457			
A-B	37	0.00			37			
A-C	209	0.00			209			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	688	0.00	494	1.394	492	66.1	320.321	F
C-AB	257	0.00	1075	0.239	256	0.6	4.565	A
C-A	514	0.00			514			
A-B	45	0.00			45			
A-C	255	0.00			255			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	688	0.00	493	1.394	493	114.8	652.304	F
C-AB	257	0.00	1076	0.239	257	0.6	4.581	A
C-A	514	0.00			514			
A-B	45	0.00			45			
A-C	255	0.00			255			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	562	0.00	530	1.060	530	122.9	800.133	F
C-AB	173	0.00	1006	0.172	174	0.4	4.503	A
C-A	456	0.00			456			
A-B	37	0.00			37			
A-C	209	0.00			209			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	471	0.00	556	0.846	551	102.7	737.341	F
C-AB	126	0.00	956	0.132	127	0.3	4.503	A
C-A	401	0.00			401			
A-B	31	0.00			31			
A-C	175	0.00			175			

2028 | WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		3.97	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	20	Stream B-AC	3.97	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	618	100.000
B		✓	204	100.000
C		✓	420	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	85	533
	B	106	0	98
	C	303	117	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.53	17.92	1.1	C
C-AB	0.30	6.78	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	154	0.00	509	0.302	152	0.4	10.047	B
C-AB	127	0.00	748	0.170	126	0.3	5.870	A
C-A	189	0.00			189			
A-B	64	0.00			64			
A-C	401	0.00			401			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	183	0.00	474	0.387	183	0.6	12.319	B
C-AB	165	0.00	757	0.218	164	0.4	6.175	A
C-A	213	0.00			213			
A-B	76	0.00			76			
A-C	479	0.00			479			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	225	0.00	425	0.528	223	1.1	17.603	C
C-AB	228	0.00	772	0.295	227	0.6	6.741	A
C-A	235	0.00			235			
A-B	94	0.00			94			
A-C	587	0.00			587			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	225	0.00	425	0.528	225	1.1	17.917	C
C-AB	228	0.00	772	0.295	228	0.6	6.775	A
C-A	234	0.00			234			
A-B	94	0.00			94			
A-C	587	0.00			587			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	183	0.00	474	0.387	185	0.6	12.551	B
C-AB	165	0.00	758	0.218	166	0.4	6.232	A
C-A	212	0.00			212			
A-B	76	0.00			76			
A-C	479	0.00			479			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	154	0.00	508	0.302	154	0.4	10.198	B
C-AB	127	0.00	748	0.170	128	0.3	5.911	A
C-A	189	0.00			189			
A-B	64	0.00			64			
A-C	401	0.00			401			

2038 | WoD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		15.05	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-7	Stream B-AC	15.05	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	448	100.000
B		✓	378	100.000
C		✓	721	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	69	379
	B	139	0	239
	C	592	129	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	1	6
	B	1	0	0
	C	5	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.88	56.79	6.1	F
C-AB	0.38	5.92	1.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	285	0.00	550	0.518	280	1.0	13.222	B
C-AB	189	0.00	919	0.205	187	0.4	5.084	A
C-A	354	0.00			354			
A-B	52	0.00			52			
A-C	285	0.00			285			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	340	0.00	518	0.656	337	1.8	19.631	C
C-AB	261	0.00	963	0.270	260	0.7	5.304	A
C-A	388	0.00			388			
A-B	62	0.00			62			
A-C	341	0.00			341			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	416	0.00	471	0.883	402	5.3	45.234	E
C-AB	392	0.00	1027	0.381	390	1.2	5.875	A
C-A	402	0.00			402			
A-B	76	0.00			76			
A-C	417	0.00			417			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	416	0.00	471	0.884	413	6.1	56.787	F
C-AB	393	0.00	1028	0.382	393	1.2	5.920	A
C-A	401	0.00			401			
A-B	76	0.00			76			
A-C	417	0.00			417			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	340	0.00	517	0.657	356	2.0	24.321	C
C-AB	262	0.00	965	0.271	264	0.7	5.364	A
C-A	386	0.00			386			
A-B	62	0.00			62			
A-C	341	0.00			341			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	285	0.00	549	0.518	288	1.1	14.036	B
C-AB	190	0.00	920	0.206	191	0.5	5.131	A
C-A	353	0.00			353			
A-B	52	0.00			52			
A-C	285	0.00			285			

2038 | WoD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		21.04	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-7	Stream B-AC	21.04	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	583	100.000
B		✓	305	100.000
C		✓	803	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	52	531
	B	99	0	206
	C	519	284	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	4
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.87	60.80	5.3	F
C-AB	0.85	26.89	7.9	D
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	230	0.00	507	0.453	226	0.8	12.693	B
C-AB	391	0.00	862	0.454	386	1.2	7.641	A
C-A	213	0.00			213			
A-B	39	0.00			39			
A-C	400	0.00			400			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	274	0.00	461	0.595	272	1.4	18.789	C
C-AB	536	0.00	897	0.598	532	2.2	10.046	B
C-A	186	0.00			186			
A-B	47	0.00			47			
A-C	477	0.00			477			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	336	0.00	391	0.859	324	4.4	47.010	E
C-AB	799	0.00	948	0.842	780	7.0	21.512	C
C-A	85	0.00			85			
A-B	57	0.00			57			
A-C	585	0.00			585			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	336	0.00	386	0.869	333	5.3	60.805	F
C-AB	814	0.00	957	0.851	810	7.9	26.894	D
C-A	70	0.00			70			
A-B	57	0.00			57			
A-C	585	0.00			585			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	274	0.00	456	0.601	289	1.6	23.200	C
C-AB	551	0.00	909	0.606	572	2.5	11.825	B
C-A	171	0.00			171			
A-B	47	0.00			47			
A-C	477	0.00			477			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	230	0.00	505	0.455	233	0.9	13.345	B
C-AB	396	0.00	865	0.457	400	1.3	7.999	A
C-A	209	0.00			209			
A-B	39	0.00			39			
A-C	400	0.00			400			

2038 | WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		428.30	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-37	Stream B-AC	428.30	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	346	100.000
B		✓	646	100.000
C		✓	752	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	83	263
	B	328	0	318
	C	618	134	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	1	7
	B	0	0	0
	C	5	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.54	1153.41	172.0	F
C-AB	0.39	5.76	1.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	486	0.00	536	0.908	461	6.2	40.303	E
C-AB	198	0.00	947	0.210	197	0.5	4.962	A
C-A	368	0.00			368			
A-B	62	0.00			62			
A-C	198	0.00			198			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	581	0.00	505	1.150	496	27.4	143.731	F
C-AB	274	0.00	996	0.275	273	0.7	5.167	A
C-A	402	0.00			402			
A-B	75	0.00			75			
A-C	236	0.00			236			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	711	0.00	461	1.543	460	90.1	473.860	F
C-AB	411	0.00	1065	0.386	409	1.2	5.715	A
C-A	416	0.00			416			
A-B	91	0.00			91			
A-C	290	0.00			290			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	711	0.00	460	1.545	460	152.8	914.665	F
C-AB	413	0.00	1066	0.387	413	1.2	5.758	A
C-A	415	0.00			415			
A-B	91	0.00			91			
A-C	290	0.00			290			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	581	0.00	504	1.151	504	172.0	1153.408	F
C-AB	275	0.00	997	0.276	277	0.7	5.226	A
C-A	401	0.00			401			
A-B	75	0.00			75			
A-C	236	0.00			236			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	486	0.00	535	0.909	532	160.5	1125.196	F
C-AB	200	0.00	948	0.211	201	0.5	5.010	A
C-A	366	0.00			366			
A-B	62	0.00			62			
A-C	198	0.00			198			

2038 | WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		128.11	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-16	Stream B-AC	128.11	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	801	100.000
B		✓	273	100.000
C		✓	782	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	169	632
	B	118	0	155
	C	406	376	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.26	321.69	28.8	F
C-AB	1.11	204.22	53.0	F
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	206	0.00	432	0.476	202	0.9	15.444	C
C-AB	470	0.00	769	0.611	462	2.0	11.750	B
C-A	119	0.00			119			
A-B	127	0.00			127			
A-C	476	0.00			476			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	245	0.00	370	0.663	242	1.8	27.248	D
C-AB	637	0.00	787	0.809	625	5.1	22.103	C
C-A	66	0.00			66			
A-B	152	0.00			152			
A-C	568	0.00			568			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	301	0.00	273	1.100	258	12.6	130.737	F
C-AB	861	0.00	779	1.105	756	31.3	97.079	F
C-A	0	0.00			0			
A-B	186	0.00			186			
A-C	696	0.00			696			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	301	0.00	238	1.265	236	28.8	321.690	F
C-AB	861	0.00	780	1.104	774	53.0	204.223	F
C-A	0	0.00			0			
A-B	186	0.00			186			
A-C	696	0.00			696			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	245	0.00	313	0.784	302	14.6	260.133	F
C-AB	703	0.00	833	0.844	811	26.1	175.233	F
C-A	0	0.00			0			
A-B	152	0.00			152			
A-C	568	0.00			568			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	206	0.00	407	0.505	259	1.1	33.467	D
C-AB	511	0.00	806	0.634	606	2.5	28.512	D
C-A	78	0.00			78			
A-B	127	0.00			127			
A-C	476	0.00			476			

2028 | 2a WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		82.07	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-21	Stream B-AC	82.07	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2028	2a WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	298	100.000
B		✓	513	100.000
C		✓	722	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	35	263
	B	225	0	288
	C	640	82	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	14
	B	0	0	0
	C	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.13	243.49	40.2	F
C-AB	0.24	4.53	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	386	0.00	565	0.684	378	2.0	18.544	C
C-AB	123	0.00	964	0.128	122	0.3	4.445	A
C-A	420	0.00			420			
A-B	26	0.00			26			
A-C	198	0.00			198			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	461	0.00	539	0.856	451	4.7	36.866	E
C-AB	171	0.00	1016	0.168	170	0.4	4.435	A
C-A	478	0.00			478			
A-B	31	0.00			31			
A-C	236	0.00			236			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	565	0.00	501	1.127	489	23.6	123.835	F
C-AB	257	0.00	1089	0.236	256	0.7	4.511	A
C-A	538	0.00			538			
A-B	39	0.00			39			
A-C	290	0.00			290			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	565	0.00	501	1.127	498	40.2	243.494	F
C-AB	258	0.00	1090	0.237	258	0.7	4.527	A
C-A	537	0.00			537			
A-B	39	0.00			39			
A-C	290	0.00			290			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	461	0.00	539	0.856	526	24.1	223.307	F
C-AB	171	0.00	1017	0.169	172	0.4	4.456	A
C-A	478	0.00			478			
A-B	31	0.00			31			
A-C	236	0.00			236			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	386	0.00	565	0.684	473	2.4	63.201	F
C-AB	124	0.00	965	0.129	125	0.3	4.466	A
C-A	419	0.00			419			
A-B	26	0.00			26			
A-C	198	0.00			198			

2028 | 2a WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		4.72	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	14	Stream B-AC	4.72	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2028	2a WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	664	100.000
B		✓	201	100.000
C		✓	481	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	117	547
	B	106	0	95
	C	320	161	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	4
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.56	20.55	1.2	C
C-AB	0.42	8.27	1.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	151	0.00	490	0.309	150	0.4	10.519	B
C-AB	179	0.00	748	0.239	177	0.4	6.393	A
C-A	183	0.00			183			
A-B	88	0.00			88			
A-C	412	0.00			412			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	181	0.00	451	0.400	180	0.7	13.214	B
C-AB	234	0.00	758	0.309	233	0.6	6.979	A
C-A	198	0.00			198			
A-B	105	0.00			105			
A-C	492	0.00			492			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	221	0.00	396	0.558	219	1.2	20.043	C
C-AB	327	0.00	774	0.422	325	1.1	8.185	A
C-A	203	0.00			203			
A-B	129	0.00			129			
A-C	602	0.00			602			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	221	0.00	396	0.559	221	1.2	20.550	C
C-AB	328	0.00	775	0.423	328	1.1	8.272	A
C-A	202	0.00			202			
A-B	129	0.00			129			
A-C	602	0.00			602			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	181	0.00	451	0.401	183	0.7	13.542	B
C-AB	235	0.00	759	0.309	237	0.7	7.080	A
C-A	198	0.00			198			
A-B	105	0.00			105			
A-C	492	0.00			492			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	151	0.00	490	0.309	152	0.5	10.704	B
C-AB	180	0.00	749	0.240	180	0.4	6.469	A
C-A	183	0.00			183			
A-B	88	0.00			88			
A-C	412	0.00			412			

2038 | 2a WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		163.77	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-28	Stream B-AC	163.77	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2038	2a WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	361	100.000
B		✓	533	100.000
C		✓	756	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	47	314
	B	273	0	260
	C	684	72	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	2	6
	B	0	0	0
	C	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.28	505.43	72.9	F
C-AB	0.22	4.37	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	401	0.00	534	0.752	390	2.7	23.581	C
C-AB	115	0.00	976	0.117	114	0.3	4.341	A
C-A	454	0.00			454			
A-B	35	0.00			35			
A-C	236	0.00			236			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	479	0.00	503	0.952	457	8.3	59.226	F
C-AB	161	0.00	1032	0.156	161	0.4	4.308	A
C-A	518	0.00			518			
A-B	42	0.00			42			
A-C	282	0.00			282			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	587	0.00	460	1.276	456	40.9	213.329	F
C-AB	248	0.00	1110	0.224	247	0.6	4.360	A
C-A	584	0.00			584			
A-B	52	0.00			52			
A-C	346	0.00			346			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	587	0.00	460	1.277	459	72.9	447.846	F
C-AB	249	0.00	1111	0.224	249	0.7	4.372	A
C-A	584	0.00			584			
A-B	52	0.00			52			
A-C	346	0.00			346			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	479	0.00	503	0.952	496	68.6	505.431	F
C-AB	162	0.00	1032	0.157	163	0.4	4.330	A
C-A	518	0.00			518			
A-B	42	0.00			42			
A-C	282	0.00			282			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	401	0.00	534	0.752	526	37.4	366.167	F
C-AB	115	0.00	977	0.118	116	0.3	4.362	A
C-A	454	0.00			454			
A-B	35	0.00			35			
A-C	236	0.00			236			

2038 | 2a WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		88.90	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-16	Stream B-AC	88.90	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2038	2a WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	825	100.000
B		✓	278	100.000
C		✓	730	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	197	628
	B	132	0	146
	C	385	345	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.18	276.97	25.2	F
C-AB	1.03	129.44	31.0	F
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	209	0.00	428	0.489	206	0.9	15.919	C
C-AB	422	0.00	754	0.560	415	1.7	10.687	B
C-A	128	0.00			128			
A-B	148	0.00			148			
A-C	473	0.00			473			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	250	0.00	369	0.677	246	1.9	28.307	D
C-AB	569	0.00	769	0.740	561	3.6	17.505	C
C-A	87	0.00			87			
A-B	177	0.00			177			
A-C	565	0.00			565			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	306	0.00	279	1.095	264	12.6	127.612	F
C-AB	804	0.00	777	1.034	737	20.4	67.620	F
C-A	0	0.00			0			
A-B	217	0.00			217			
A-C	691	0.00			691			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	306	0.00	259	1.184	256	25.2	276.967	F
C-AB	804	0.00	779	1.032	762	31.0	129.436	F
C-A	0	0.00			0			
A-B	217	0.00			217			
A-C	691	0.00			691			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	250	0.00	338	0.739	325	6.3	185.303	F
C-AB	628	0.00	814	0.771	729	5.7	68.517	F
C-A	29	0.00			29			
A-B	177	0.00			177			
A-C	565	0.00			565			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	209	0.00	423	0.495	230	1.0	20.605	C
C-AB	430	0.00	762	0.565	446	1.8	12.313	B
C-A	119	0.00			119			
A-B	148	0.00			148			
A-C	473	0.00			473			

APPENDIX 54: Junction 9: A453/East Midlands Airport Roundabout Stage 1A/2A Modelling Results

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.0.0.2177
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Filename: 250619 A453_EMA Roundabout ARCADY Model (Lane Sim)_Stage 1a+2a.j11
Path: J:\2022\220500-East Midlands Gateway Phase 2 (1)\ProjectDelivery\01-WIP\DesignAndCalculations\T&I Planning\Traffic Models\9. A453_EMA Roundabout
Report generation date: 20/06/2025 16:11:17

»2022 | Base Flows | AM
»2022 | Base Flows | PM
»2028 | WoD Flows | AM
»2028 | WoD Flows | PM
»2028 | WD Flows | AM
»2028 | WD Flows | PM
»2038 | WoD Flows | AM
»2038 | WoD Flows | PM
»2038 | WD Flows | AM
»2038 | WD Flows | PM
»2028 | 2a WD Flows | AM
»2028 | 2a WD Flows | PM
»2038 | 2a WD Flows | AM
»2038 | 2a WD Flows | PM

Summary of junction performance

	AM								PM							
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
[Lane Simulation] - 2022 - Base Flows																
Arm 1	D1	0.2	4.22	0.14	A	7.50	A	%	D2	0.4	4.72	0.25	A	5.45	A	%
Arm 2		1.1	4.95	0.35	A					1.0	4.78	0.32	A			
Arm 3		2.0	11.14	0.58	B			[ ]		0.9	6.98	0.33	A			[ ]
[Lane Simulation] - 2028 - 2a WD Flows																
Arm 1	D11	0.2	4.82	0.12	A	34.74	D	%	D12	1.2	5.05	0.35	A	6.80	A	%
Arm 2		1.0	5.44	0.33	A					1.4	6.02	0.39	A			
Arm 3		16.7	57.19	0.95	F			[ ]		1.1	9.46	0.52	A			[ ]
[Lane Simulation] - 2028 - WD Flows																
Arm 1	D5	0.3	4.77	0.13	A	50.75	F	%	D6	0.6	4.90	0.35	A	6.29	A	%
Arm 2		1.0	5.54	0.31	A					1.4	5.97	0.40	A			
Arm 3		25.9	84.01	0.99	F			[ ]		1.2	8.31	0.45	A			[ ]
[Lane Simulation] - 2028 - WoD Flows																
Arm 1	D3	0.2	4.69	0.12	A	19.78	C	%	D4	0.7	5.00	0.35	A	7.17	A	%
Arm 2		1.0	5.41	0.34	A					1.3	6.27	0.35	A			
Arm 3		8.0	32.18	0.89	D			[ ]		1.5	10.47	0.51	B			[ ]
[Lane Simulation] - 2038 - 2a WD Flows																
Arm 1	D13	0.3	4.79	0.15	A	118.62	F	%	D14	1.0	6.34	0.44	A	11.70	B	%
Arm 2		0.9	5.18	0.33	A					1.4	6.43	0.43	A			
Arm 3		69.9	196.36	1.12	F			[ ]		4.7	19.71	0.79	C			[ ]
[Lane Simulation] - 2038 - WD Flows																
Arm 1	D9	0.4	4.84	0.17	A	135.07	F	%	D10	1.0	6.50	0.46	A	13.62	B	%
Arm 2		0.8	5.28	0.33	A					1.6	6.60	0.45	A			
Arm 3		74.3	229.49	1.15	F			[ ]		6.1	23.86	0.84	C			[ ]
[Lane Simulation] - 2038 - WoD Flows																
Arm 1	D7	0.4	4.85	0.16	A	95.46	F	%	D8	1.1	6.34	0.44	A	14.10	B	%
Arm 2		1.1	5.47	0.35	A					1.6	6.23	0.42	A			
Arm 3		56.3	166.82	1.11	F			[ ]		6.3	24.50	0.84	C			[ ]

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	East Midlands Gateway Phase 2
Location	A453/EMA Roundabout
Site number	
Date	24/01/2023
Version	
Status	(new file)
Identifier	
Client	SEGRO
Jobnumber	220500
Enumerator	BWB\matt.corner
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75					✓	Delay	0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Relaxation factor for capacity/RFC runs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials
Delay	1.00	100000	100000	Calculate for all arms	3.00	-1	3	1	60	✓			298314417	52

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	Base Flows	AM	ONE HOUR	08:00	09:30	15	✓
D2	2022	Base Flows	PM	ONE HOUR	17:00	18:30	15	✓
D3	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D4	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15	✓
D5	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D6	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15	✓
D7	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D8	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15	✓
D9	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D10	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15	✓
D11	2028	2a WD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D12	2028	2a WD Flows	PM	ONE HOUR	17:00	18:30	15	✓
D13	2038	2a WD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D14	2038	2a WD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	✓	100.000	100.000

2022 | Base Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	7.50	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.50	A

Arms

Arms

Arm	Name	Description	No give-way line
1	EMA Access		
2	A453 (E)		
3	A453 (W)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	6.13	8.46	8.0	20.5	50.0	21.0		
2	3.77	8.05	49.0	13.3	50.0	35.0		
3	3.89	6.48	6.5	24.5	50.0	27.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.730	2295
2	0.666	2065
3	0.586	1553

The slope and intercept shown above include any corrections and adjustments.

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1	Evenly split	10.00
2	Evenly split	50.00
3	Evenly split	50.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1	Entry	1	1	2	✓	3.00			0	99999	
			2	1, 3	✓	3.00			0	99999	
		2	1	(1, 2, 3)		Infinity					
	Exit	1	1			Infinity					
2	Entry	1	1	3	✓	11.00			0	99999	
			2	1, 2, (3)	✓	11.00			0	99999	
		2	1	(1, 2, 3)		Infinity					
	Exit	1	1			Infinity					
3	Entry	1	1	1, 2	✓	14.00			0	99999	
			2	(2), 3	✓	14.00			0	99999	
		2	1	(1, 2, 3)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1	Entry	1	1	0.365	1147
			2	0.365	1147
2	Entry	1	1	0.333	1033
			2	0.333	1033
3	Entry	1	1	0.293	777
			2	0.293	777

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm		
			1	2	3
1	1	1		✓	
		2	✓		✓
	2	1	✓	✓	✓
2	1	1			✓
		2	✓	✓	
	2	1	✓	✓	✓
3	1	1	✓	✓	
		2			✓
	2	1	✓	✓	✓

Summary of Entry Lane allowed secondary movements

Arm	Lane Level	Lane	Destination arm		
			1	2	3
1	1	1			
		2			
	2	1			
2	1	1			
		2			✓
	2	1			
3	1	1			
		2		✓	
	2	1			

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	Base Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	153	100.000
2		ONE HOUR	✓	631	100.000
3		ONE HOUR	✓	589	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	114	39
	2	241	0	390
	3	129	460	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.14	4.22	0.2	A	145	217
2	0.35	4.95	1.1	A	583	874
3	0.58	11.14	2.0	B	539	809

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	123	31	327	1335	0.092	123	119	282	0.0	0.2	3.849	A
2	488	122	33	2041	0.239	486	479	417	0.0	0.6	4.279	A
3	423	106	185	1180	0.359	424	431	334	0.0	1.0	7.454	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	135	34	413	1324	0.102	135	140	328	0.2	0.1	3.763	A
2	556	139	35	2051	0.271	558	572	514	0.6	0.7	4.384	A
3	534	133	209	1197	0.446	532	525	384	1.0	1.2	8.714	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	168	42	506	1283	0.131	168	172	425	0.1	0.1	4.225	A
2	713	178	44	2032	0.351	716	711	630	0.7	0.8	4.903	A
3	655	164	279	1139	0.575	651	650	480	1.2	2.0	11.138	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	181	45	511	1277	0.142	182	179	426	0.1	0.2	4.203	A
2	698	174	47	2032	0.344	700	707	646	0.8	1.1	4.949	A
3	658	164	277	1165	0.565	660	665	470	2.0	1.6	10.164	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	143	36	413	1307	0.110	143	147	329	0.2	0.2	3.860	A
2	552	138	36	1980	0.279	553	569	520	1.1	0.7	4.535	A
3	530	132	214	1127	0.470	528	537	376	1.6	1.8	8.937	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	118	29	333	1337	0.088	118	121	280	0.2	0.1	3.808	A
2	489	122	30	2091	0.234	489	495	421	0.7	0.6	4.387	A
3	435	109	182	1152	0.378	432	449	337	1.8	0.9	7.415	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	90	1028	0.088	90	90	0.0	0.1	3.910	A
			2	1, 3	33	1028	0.033	33	30	0.0	0.1	3.661	A
		2	1	(1, 2, 3)	123			123	120	0.0	0.0	0.001	A
	Exit	1	1		282			282	281	0.0	0.0	0.000	A
2	Entry	1	1	3	233	1022	0.228	232	224	0.0	0.2	4.301	A
			2	1, 2, (3)	255	1022	0.249	254	255	0.0	0.3	4.260	A
		2	1	(1, 2, 3)	488			488	482	0.0	0.0	0.000	A
	Exit	1	1		417			417	424	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	314	722	0.434	313	317	0.0	0.9	8.146	A
			2	(2), 3	109	722	0.151	111	114	0.0	0.1	5.523	A
		2	1	(1, 2, 3)	423			423	435	0.0	0.0	0.000	A
	Exit	1	1		334			334	324	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	100	997	0.100	101	104	0.1	0.1	3.784	A
			2	1, 3	35	997	0.035	35	37	0.1	0.0	3.700	A
		2	1	(1, 2, 3)	135			135	140	0.0	0.0	0.001	A
	Exit	1	1		328			328	339	0.0	0.0	0.000	A
2	Entry	1	1	3	267	1021	0.261	268	268	0.2	0.4	4.251	A
			2	1, 2, (3)	290	1021	0.284	291	304	0.3	0.3	4.502	A
		2	1	(1, 2, 3)	556			556	573	0.0	0.0	0.000	A
	Exit	1	1		514			514	512	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	395	715	0.552	394	384	0.9	1.0	9.746	A
			2	(2), 3	139	715	0.194	138	141	0.1	0.2	5.913	A
		2	1	(1, 2, 3)	534			534	526	0.0	0.0	0.000	A
	Exit	1	1		384			384	386	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	124	963	0.129	124	128	0.1	0.1	4.313	A
			2	1, 3	45	963	0.046	44	43	0.0	0.0	3.950	A
		2	1	(1, 2, 3)	168			168	172	0.0	0.0	0.003	A
	Exit	1	1		425			425	417	0.0	0.0	0.000	A
2	Entry	1	1	3	333	1018	0.327	333	331	0.4	0.4	4.717	A
			2	1, 2, (3)	379	1018	0.373	382	380	0.3	0.4	5.064	A
		2	1	(1, 2, 3)	713			713	712	0.0	0.0	0.000	A
	Exit	1	1		630			630	634	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	466	695	0.671	462	461	1.0	1.8	13.020	B
			2	(2), 3	189	695	0.272	189	189	0.2	0.2	6.533	A
		2	1	(1, 2, 3)	655			655	653	0.0	0.0	0.000	A
	Exit	1	1		480			480	481	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	134	961	0.140	135	135	0.1	0.1	4.325	A
			2	1, 3	46	961	0.048	47	44	0.0	0.0	3.820	A
		2	1	(1, 2, 3)	181			181	179	0.0	0.0	0.002	A
	Exit	1	1		426			426	421	0.0	0.0	0.000	A
2	Entry	1	1	3	321	1017	0.316	321	328	0.4	0.5	4.875	A
			2	1, 2, (3)	377	1017	0.370	379	379	0.4	0.5	5.013	A
		2	1	(1, 2, 3)	698			698	708	0.0	0.0	0.000	A
	Exit	1	1		646			646	654	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	470	695	0.676	474	474	1.8	1.2	11.562	B
			2	(2), 3	188	695	0.270	186	191	0.2	0.4	6.730	A
		2	1	(1, 2, 3)	658			658	663	0.0	0.0	0.000	A
	Exit	1	1		470			470	476	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	108	997	0.108	107	111	0.1	0.2	3.863	A
			2	1, 3	36	997	0.036	36	36	0.0	0.0	3.841	A
		2	1	(1, 2, 3)	143			143	147	0.0	0.0	0.002	A
	Exit	1	1		329			329	337	0.0	0.0	0.000	A
2	Entry	1	1	3	256	1021	0.251	257	265	0.5	0.4	4.502	A
			2	1, 2, (3)	296	1021	0.290	297	304	0.5	0.3	4.565	A
		2	1	(1, 2, 3)	552			552	567	0.0	0.0	0.000	A
	Exit	1	1		520			520	529	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	387	714	0.542	386	389	1.2	1.5	10.054	B
			2	(2), 3	143	714	0.200	142	148	0.4	0.3	5.970	A
		2	1	(1, 2, 3)	530			530	537	0.0	0.0	0.000	A
	Exit	1	1		376			376	387	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	88	1026	0.086	88	89	0.2	0.1	3.900	A
			2	1, 3	30	1026	0.029	30	32	0.0	0.0	3.546	A
		2	1	(1, 2, 3)	118			118	120	0.0	0.0	0.001	A
	Exit	1	1		280			280	282	0.0	0.0	0.000	A
2	Entry	1	1	3	235	1023	0.230	234	235	0.4	0.3	4.199	A
			2	1, 2, (3)	254	1023	0.248	255	260	0.3	0.3	4.556	A
		2	1	(1, 2, 3)	489			489	494	0.0	0.0	0.000	A
	Exit	1	1		421			421	441	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	325	723	0.449	323	334	1.5	0.7	8.085	A
			2	(2), 3	110	723	0.153	109	115	0.3	0.2	5.486	A
		2	1	(1, 2, 3)	435			435	445	0.0	0.0	0.000	A
	Exit	1	1		337			337	341	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	90	23	1147	1027	0.088	90	90	0.0	0.1	3.910	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	33	8	1147	1028	0.033	33	30	0.0	0.1	3.661	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	90	23	-	-	-	90	90	0.0	0.0	0.001	A
				3	33	8	-	-	-	33	30	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	233	58	1033	1022	0.228	232	224	0.0	0.2	4.301	A
			2	1	186	46	1033	1022	0.182	185	185	0.0	0.3	4.463	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	69	17	1033	1021	0.068	69	70	0.0	0.1	3.723	A
		2	1	1	186	46	-	-	-	186	186	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	302	76	-	-	-	302	295	0.0	0.0	0.000	A
3	Entry	1	1	1	97	24	777	721	0.134	97	96	0.0	0.2	8.853	A
				2	217	54	777	722	0.300	216	221	0.0	0.7	7.839	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	109	27	777	720	0.152	111	114	0.0	0.1	5.523	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	97	24	-	-	-	97	97	0.0	0.0	0.000	A
				2	326	82	-	-	-	326	338	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	100	25	1147	999	0.100	101	104	0.1	0.1	3.784	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	1147	994	0.035	35	37	0.1	0.0	3.700	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	100	25	-	-	-	100	104	0.0	0.0	0.001	A
				3	35	9	-	-	-	35	36	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	267	67	1033	1021	0.261	268	268	0.2	0.4	4.251	A
			2	1	208	52	1033	1021	0.204	209	222	0.3	0.2	4.790	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	81	20	1033	1022	0.080	82	82	0.1	0.1	3.722	A
		2	1	1	208	52	-	-	-	208	222	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	348	87	-	-	-	348	350	0.0	0.0	0.000	A
3	Entry	1	1	1	121	30	777	715	0.169	119	117	0.2	0.4	10.564	B
				2	274	68	777	716	0.382	275	267	0.7	0.6	9.387	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	139	35	777	715	0.194	138	141	0.1	0.2	5.913	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	121	30	-	-	-	121	117	0.0	0.0	0.000	A
				2	412	103	-	-	-	412	409	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	124	31	1147	962	0.129	124	128	0.1	0.1	4.313	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	45	11	1147	964	0.046	44	43	0.0	0.0	3.950	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	124	31	-	-	-	124	129	0.0	0.0	0.005	A
				3	45	11	-	-	-	45	43	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	333	83	1033	1018	0.327	333	331	0.4	0.4	4.717	A
			2	1	278	69	1033	1018	0.273	279	273	0.2	0.3	5.452	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	102	25	1033	1018	0.100	103	107	0.1	0.1	4.071	A
		2	1	1	278	69	-	-	-	278	273	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	435	109	-	-	-	435	438	0.0	0.0	0.000	A
3	Entry	1	1	1	146	37	777	694	0.210	145	144	0.4	0.6	14.149	B
				2	320	80	777	695	0.461	317	316	0.6	1.2	12.504	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	189	47	777	695	0.272	189	189	0.2	0.2	6.533	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	146	37	-	-	-	146	145	0.0	0.0	0.000	A
				2	509	127	-	-	-	509	508	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	134	34	1147	960	0.140	135	135	0.1	0.1	4.325	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	46	12	1147	960	0.048	47	44	0.0	0.0	3.820	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	134	34	-	-	-	134	135	0.0	0.0	0.003	A
				3	46	12	-	-	-	46	44	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	321	80	1033	1017	0.316	321	328	0.4	0.5	4.875	A
			2	1	274	69	1033	1017	0.270	277	275	0.3	0.4	5.372	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	102	26	1033	1018	0.100	102	105	0.1	0.1	4.071	A
		2	1	1	274	69	-	-	-	274	275	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	423	106	-	-	-	423	433	0.0	0.0	0.000	A
3	Entry	1	1	1	148	37	777	696	0.213	149	146	0.6	0.4	11.886	B
				2	322	80	777	696	0.462	324	328	1.2	0.8	11.418	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	188	47	777	696	0.270	186	191	0.2	0.4	6.730	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	148	37	-	-	-	148	145	0.0	0.0	0.000	A
				2	510	127	-	-	-	510	518	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	108	27	1147	996	0.108	107	111	0.1	0.2	3.863	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	36	9	1147	998	0.036	36	36	0.0	0.0	3.841	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	108	27	-	-	-	108	111	0.0	0.0	0.003	A
				3	36	9	-	-	-	36	36	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	256	64	1033	1021	0.251	257	265	0.5	0.4	4.502	A
			2	1	213	53	1033	1021	0.208	214	218	0.4	0.2	4.856	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	83	21	1033	1021	0.082	83	86	0.1	0.1	3.832	A
		2	1	1	213	53	-	-	-	213	217	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	340	85	-	-	-	340	350	0.0	0.0	0.000	A
3	Entry	1	1	1	113	28	777	713	0.159	115	119	0.4	0.4	10.744	B
				2	274	68	777	714	0.384	271	270	0.8	1.1	9.751	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	777	714	0.200	142	148	0.4	0.3	5.970	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	113	28	-	-	-	113	119	0.0	0.0	0.000	A
				2	417	104	-	-	-	417	418	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	88	22	1147	1025	0.086	88	89	0.2	0.1	3.900	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	8	1147	1026	0.029	30	32	0.0	0.0	3.546	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	88	22	-	-	-	88	89	0.0	0.0	0.002	A
				3	30	8	-	-	-	30	32	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	235	59	1033	1023	0.230	234	235	0.4	0.3	4.199	A
			2	1	181	45	1033	1023	0.177	182	185	0.2	0.2	4.806	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	72	18	1033	1022	0.071	73	75	0.1	0.1	3.940	A
		2	1	1	181	45	-	-	-	181	185	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	307	77	-	-	-	307	309	0.0	0.0	0.000	A
3	Entry	1	1	1	99	25	777	723	0.137	99	97	0.4	0.2	8.644	A
				2	226	56	777	723	0.312	224	237	1.1	0.5	7.856	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	110	28	777	723	0.153	109	115	0.3	0.2	5.486	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	99	25	-	-	-	99	96	0.0	0.0	0.000	A
				2	336	84	-	-	-	336	349	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2022 | Base Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	5.45	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.45	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	Base Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	289	100.000
2		ONE HOUR	✓	576	100.000
3		ONE HOUR	✓	388	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	224	65
	2	133	0	443
	3	41	347	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

From \ To	1	2	3
1	0	0	0
2	0	0	0
3	0	0	0

Cyclist %

From \ To	1	2	3
1	0	0	0
2	0	0	0
3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.25	4.72	0.4	A	263	395
2	0.32	4.78	1.0	A	523	785
3	0.33	6.98	0.9	A	353	529

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	217	54	266	1316	0.165	216	218	126	0.0	0.1	3.887	A
2	421	105	48	1993	0.211	421	435	435	0.0	0.5	4.246	A
3	296	74	94	1284	0.231	299	285	375	0.0	0.4	5.954	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	252	63	298	1326	0.190	252	260	163	0.1	0.3	4.086	A
2	528	132	48	2055	0.257	529	525	502	0.5	0.7	4.360	A
3	336	84	123	1315	0.256	337	349	454	0.4	0.6	6.092	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	325	81	368	1278	0.255	326	335	194	0.3	0.4	4.616	A
2	624	156	69	1978	0.316	629	648	625	0.7	0.8	4.780	A
3	410	102	153	1263	0.325	409	426	545	0.6	0.9	6.809	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	312	78	379	1241	0.251	314	324	185	0.4	0.4	4.722	A
2	621	155	70	1950	0.318	619	638	623	0.8	1.0	4.696	A
3	421	105	139	1294	0.325	425	429	550	0.9	0.5	6.981	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	251	63	315	1313	0.191	249	262	169	0.4	0.4	4.317	A
2	538	134	52	2020	0.266	539	533	512	1.0	0.5	4.397	A
3	355	89	129	1285	0.276	355	363	462	0.5	0.6	6.240	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	222	55	266	1364	0.162	222	225	125	0.4	0.2	3.977	A
2	407	102	50	1980	0.205	405	434	439	0.5	0.6	4.183	A
3	298	75	97	1303	0.229	294	304	358	0.6	0.6	6.050	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	169	1050	0.161	168	173	0.0	0.1	3.999	A
			2	1, 3	48	1050	0.045	48	46	0.0	0.0	3.421	A
		2	1	(1, 2, 3)	217			217	219	0.0	0.0	0.009	A
	Exit	1	1		126			126	126	0.0	0.0	0.000	A
2	Entry	1	1	3	232	1017	0.228	232	250	0.0	0.3	4.394	A
			2	1, 2, (3)	189	1017	0.185	189	185	0.0	0.2	4.045	A
		2	1	(1, 2, 3)	421			421	437	0.0	0.0	0.000	A
	Exit	1	1		435			435	428	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	217	749	0.290	219	210	0.0	0.3	6.284	A
			2	(2), 3	79	749	0.105	79	75	0.0	0.1	5.033	A
		2	1	(1, 2, 3)	296			296	287	0.0	0.0	0.000	A
	Exit	1	1		375			375	385	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	204	1039	0.197	204	204	0.1	0.3	4.156	A
			2	1, 3	48	1039	0.046	48	56	0.0	0.0	3.719	A
		2	1	(1, 2, 3)	252			252	261	0.0	0.0	0.025	A
	Exit	1	1		163			163	160	0.0	0.0	0.000	A
2	Entry	1	1	3	300	1017	0.295	300	295	0.3	0.4	4.585	A
			2	1, 2, (3)	229	1017	0.225	229	231	0.2	0.2	4.072	A
		2	1	(1, 2, 3)	528			528	526	0.0	0.0	0.000	A
	Exit	1	1		502			502	514	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	245	740	0.331	247	253	0.3	0.4	6.492	A
			2	(2), 3	91	740	0.123	91	96	0.1	0.1	5.035	A
		2	1	(1, 2, 3)	336			336	349	0.0	0.0	0.000	A
	Exit	1	1		454			454	459	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	256	1013	0.252	257	262	0.3	0.3	4.727	A
			2	1, 3	70	1013	0.069	69	73	0.0	0.1	3.863	A
		2	1	(1, 2, 3)	325			325	335	0.0	0.0	0.078	A
	Exit	1	1		194			194	197	0.0	0.0	0.000	A
2	Entry	1	1	3	349	1010	0.346	353	360	0.4	0.4	4.980	A
			2	1, 2, (3)	275	1010	0.272	276	288	0.2	0.4	4.530	A
		2	1	(1, 2, 3)	624			624	648	0.0	0.0	0.000	A
	Exit	1	1		625			625	643	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	296	732	0.404	295	306	0.4	0.8	7.371	A
			2	(2), 3	114	732	0.156	114	119	0.1	0.1	5.357	A
		2	1	(1, 2, 3)	410			410	427	0.0	0.0	0.000	A
	Exit	1	1		545			545	568	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	243	1009	0.241	244	253	0.3	0.3	4.784	A
			2	1, 3	69	1009	0.069	70	72	0.1	0.0	4.146	A
		2	1	(1, 2, 3)	312			312	324	0.0	0.0	0.077	A
	Exit	1	1		185			185	192	0.0	0.0	0.000	A
2	Entry	1	1	3	348	1010	0.344	345	354	0.4	0.7	4.832	A
			2	1, 2, (3)	273	1010	0.270	275	283	0.4	0.3	4.524	A
		2	1	(1, 2, 3)	621			621	638	0.0	0.0	0.000	A
	Exit	1	1		623			623	635	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	299	736	0.406	304	305	0.8	0.4	7.703	A
			2	(2), 3	122	736	0.165	121	124	0.1	0.1	5.221	A
		2	1	(1, 2, 3)	421			421	427	0.0	0.0	0.000	A
	Exit	1	1		550			550	564	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	199	1032	0.193	197	203	0.3	0.4	4.434	A
			2	1, 3	52	1032	0.050	52	59	0.0	0.0	3.753	A
		2	1	(1, 2, 3)	251			251	262	0.0	0.0	0.038	A
	Exit	1	1		169			169	162	0.0	0.0	0.000	A
2	Entry	1	1	3	301	1015	0.297	300	303	0.7	0.3	4.558	A
			2	1, 2, (3)	236	1015	0.233	239	230	0.3	0.1	4.186	A
		2	1	(1, 2, 3)	538			538	531	0.0	0.0	0.000	A
	Exit	1	1		512			512	526	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	254	739	0.343	253	262	0.4	0.5	6.656	A
			2	(2), 3	101	739	0.137	102	101	0.1	0.1	5.153	A
		2	1	(1, 2, 3)	355			355	363	0.0	0.0	0.000	A
	Exit	1	1		462			462	470	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	172	1050	0.164	172	176	0.4	0.1	4.011	A
			2	1, 3	50	1050	0.047	50	49	0.0	0.0	3.779	A
		2	1	(1, 2, 3)	222			222	224	0.0	0.0	0.017	A
	Exit	1	1		125			125	132	0.0	0.0	0.000	A
2	Entry	1	1	3	228	1016	0.224	227	242	0.3	0.5	4.441	A
			2	1, 2, (3)	179	1016	0.176	178	191	0.1	0.1	3.856	A
		2	1	(1, 2, 3)	407			407	434	0.0	0.0	0.000	A
	Exit	1	1		439			439	448	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	217	748	0.290	214	224	0.5	0.6	6.394	A
			2	(2), 3	81	748	0.108	80	80	0.1	0.1	5.083	A
		2	1	(1, 2, 3)	298			298	304	0.0	0.0	0.000	A
	Exit	1	1		358			358	383	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	169	42	1147	1050	0.161	168	173	0.0	0.1	3.999	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	48	12	1147	1053	0.045	48	46	0.0	0.0	3.421	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	169	42	-	-	-	169	173	0.0	0.0	0.011	A
				3	48	12	-	-	-	48	46	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	232	58	1033	1017	0.228	232	250	0.0	0.3	4.394	A
			2	1	93	23	1033	1017	0.091	94	96	0.0	0.1	4.316	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	96	24	1033	1017	0.094	95	89	0.0	0.1	3.752	A
		2	1	1	93	23	-	-	-	93	97	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	328	82	-	-	-	328	340	0.0	0.0	0.000	A
3	Entry	1	1	1	31	8	777	747	0.041	32	30	0.0	0.0	6.966	A
				2	186	47	777	750	0.249	187	180	0.0	0.3	6.171	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	79	20	777	748	0.105	79	75	0.0	0.1	5.033	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	31	8	-	-	-	31	30	0.0	0.0	0.000	A
				2	265	66	-	-	-	265	257	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	204	51	1147	1041	0.197	204	204	0.1	0.3	4.156	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	48	12	1147	1038	0.046	48	56	0.0	0.0	3.719	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	204	51	-	-	-	204	204	0.0	0.0	0.032	A
				3	48	12	-	-	-	48	56	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	300	75	1033	1016	0.295	300	295	0.3	0.4	4.585	A
			2	1	123	31	1033	1016	0.121	123	122	0.1	0.1	4.339	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	106	26	1033	1016	0.104	106	108	0.1	0.1	3.770	A
		2	1	1	123	31	-	-	-	123	122	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	405	101	-	-	-	405	404	0.0	0.0	0.000	A
3	Entry	1	1	1	39	10	777	740	0.053	40	38	0.0	0.1	6.253	A
				2	206	51	777	740	0.278	207	215	0.3	0.3	6.535	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	91	23	777	740	0.123	91	96	0.1	0.1	5.035	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	39	10	-	-	-	39	38	0.0	0.0	0.000	A
				2	297	74	-	-	-	297	311	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	256	64	1147	1012	0.253	257	262	0.3	0.3	4.727	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	70	17	1147	1012	0.069	69	73	0.0	0.1	3.863	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	256	64	-	-	-	256	262	0.0	0.0	0.088	A
				3	70	17	-	-	-	70	74	0.0	0.0	0.046	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	349	87	1033	1010	0.346	353	360	0.4	0.4	4.980	A
			2	1	151	38	1033	1010	0.149	153	153	0.1	0.2	4.947	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	124	31	1033	1009	0.123	124	135	0.1	0.2	4.055	A
		2	1	1	151	38	-	-	-	151	153	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	474	118	-	-	-	474	495	0.0	0.0	0.000	A
3	Entry	1	1	1	42	10	777	734	0.057	41	44	0.1	0.1	7.965	A
				2	254	63	777	732	0.347	254	262	0.3	0.7	7.271	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	114	29	777	732	0.156	114	119	0.1	0.1	5.357	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	42	10	-	-	-	42	44	0.0	0.0	0.000	A
				2	368	92	-	-	-	368	383	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	243	61	1147	1009	0.241	244	253	0.3	0.3	4.784	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	69	17	1147	1012	0.068	70	72	0.1	0.0	4.146	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	242	61	-	-	-	243	253	0.0	0.0	0.095	A
				3	69	17	-	-	-	69	72	0.0	0.0	0.014	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	348	87	1033	1010	0.344	345	354	0.4	0.7	4.832	A
			2	1	138	35	1033	1010	0.137	139	145	0.2	0.2	4.923	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	135	34	1033	1009	0.133	135	138	0.2	0.1	4.102	A
		2	1	1	138	35	-	-	-	138	145	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	482	121	-	-	-	482	493	0.0	0.0	0.000	A
3	Entry	1	1	1	46	11	777	734	0.062	46	47	0.1	0.1	8.910	A
				2	253	63	777	736	0.344	258	258	0.7	0.3	7.484	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	122	30	777	735	0.166	121	124	0.1	0.1	5.221	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	46	11	-	-	-	46	47	0.0	0.0	0.000	A
				2	375	94	-	-	-	375	380	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	199	50	1147	1032	0.193	197	203	0.3	0.4	4.434	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	52	13	1147	1030	0.050	52	59	0.0	0.0	3.753	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	199	50	-	-	-	199	203	0.0	0.0	0.042	A
				3	52	13	-	-	-	52	59	0.0	0.0	0.027	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	301	75	1033	1015	0.297	300	303	0.7	0.3	4.558	A
			2	1	128	32	1033	1016	0.126	129	122	0.2	0.1	4.406	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	108	27	1033	1016	0.107	109	108	0.1	0.1	3.937	A
		2	1	1	128	32	-	-	-	128	121	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	410	102	-	-	-	410	410	0.0	0.0	0.000	A
3	Entry	1	1	1	40	10	777	739	0.055	40	40	0.1	0.1	6.847	A
				2	213	53	777	740	0.288	213	223	0.3	0.4	6.622	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	101	25	777	739	0.137	102	101	0.1	0.1	5.153	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	40	10	-	-	-	40	40	0.0	0.0	0.000	A
				2	314	79	-	-	-	314	324	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	172	43	1147	1049	0.164	172	176	0.4	0.1	4.011	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	50	12	1147	1050	0.047	50	49	0.0	0.0	3.779	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	172	43	-	-	-	172	175	0.0	0.0	0.021	A
				3	50	12	-	-	-	50	49	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	228	57	1033	1016	0.224	227	242	0.3	0.5	4.441	A
			2	1	97	24	1033	1016	0.096	97	99	0.1	0.1	4.032	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	82	20	1033	1016	0.080	82	92	0.1	0.0	3.665	A
		2	1	1	97	24	-	-	-	97	100	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	309	77	-	-	-	309	335	0.0	0.0	0.000	A
3	Entry	1	1	1	28	7	777	748	0.038	28	33	0.1	0.1	6.796	A
				2	189	47	777	748	0.253	186	191	0.4	0.5	6.325	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	81	20	777	746	0.108	80	80	0.1	0.1	5.083	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	28	7	-	-	-	28	33	0.0	0.0	0.000	A
				2	270	67	-	-	-	270	271	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WoD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	19.78	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	19.78	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	144	100.000
2		ONE HOUR	✓	581	100.000
3		ONE HOUR	✓	847	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	60	84
	2	266	0	315
	3	255	592	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	10	4
	2	1	0	15
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.12	4.69	0.2	A	130	196
2	0.34	5.41	1.0	A	533	799
3	0.89	32.18	8.0	D	777	1165

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	106	26	447	1456	0.073	106	111	388	0.0	0.1	4.025	A
2	433	108	61	1938	0.223	430	437	492	0.0	0.8	4.663	A
3	635	159	200	1087	0.584	635	629	291	0.0	1.8	10.285	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	32	537	1388	0.093	129	137	476	0.1	0.2	4.401	A
2	536	134	75	1844	0.290	535	541	592	0.8	0.9	5.023	A
3	778	194	242	1073	0.725	771	763	368	1.8	3.6	14.422	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	155	39	642	1330	0.116	156	163	563	0.2	0.2	4.694	A
2	635	159	92	1878	0.338	637	644	707	0.9	0.9	5.412	A
3	915	229	291	1029	0.889	913	920	437	3.6	8.0	29.021	D

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	159	40	665	1308	0.121	159	164	564	0.2	0.1	4.601	A
2	631	158	92	1915	0.329	630	640	732	0.9	1.0	5.403	A
3	932	233	288	1082	0.861	940	935	434	8.0	7.5	32.177	D

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	126	32	545	1404	0.090	126	137	470	0.1	0.2	4.502	A
2	516	129	74	1971	0.262	516	528	598	1.0	0.8	5.060	A
3	774	194	241	1057	0.732	775	787	348	7.5	3.2	17.742	C

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	109	27	443	1454	0.075	109	115	389	0.2	0.1	4.469	A
2	445	111	62	1969	0.226	446	446	490	0.8	0.6	4.864	A
3	626	156	203	1091	0.573	628	650	304	3.2	1.8	11.097	B

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	45	984	0.045	44	47	0.0	0.1	4.168	A
			2	1, 3	61	984	0.062	61	64	0.0	0.1	3.924	A
		2	1	(1, 2, 3)	106			106	111	0.0	0.0	0.000	A
	Exit	1	1		388			388	387	0.0	0.0	0.000	A
2	Entry	1	1	3	181	1012	0.179	180	184	0.0	0.3	4.631	A
			2	1, 2, (3)	251	1012	0.248	250	253	0.0	0.4	4.684	A
		2	1	(1, 2, 3)	433			433	440	0.0	0.0	0.000	A
	Exit	1	1		492			492	489	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	469	718	0.654	471	464	0.0	1.5	11.765	B
			2	(2), 3	165	718	0.230	164	165	0.0	0.3	6.109	A
		2	1	(1, 2, 3)	635			635	637	0.0	0.0	0.001	A
	Exit	1	1		291			291	301	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	54	951	0.057	54	58	0.1	0.0	4.299	A
			2	1, 3	75	951	0.079	75	79	0.1	0.1	4.420	A
		2	1	(1, 2, 3)	129			129	137	0.0	0.0	0.031	A
	Exit	1	1		476			476	478	0.0	0.0	0.000	A
2	Entry	1	1	3	225	1008	0.223	224	227	0.3	0.4	4.967	A
			2	1, 2, (3)	310	1008	0.308	311	314	0.4	0.5	5.059	A
		2	1	(1, 2, 3)	536			536	542	0.0	0.0	0.000	A
	Exit	1	1		592			592	590	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	555	706	0.787	550	545	1.5	3.1	17.378	C
			2	(2), 3	222	706	0.315	221	218	0.3	0.5	6.899	A
		2	1	(1, 2, 3)	778			777	770	0.0	0.0	0.012	A
	Exit	1	1		368			368	374	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	65	913	0.071	65	67	0.0	0.1	4.737	A
			2	1, 3	90	913	0.098	92	96	0.1	0.1	4.626	A
		2	1	(1, 2, 3)	155			155	163	0.0	0.0	0.024	A
	Exit	1	1		563			563	574	0.0	0.0	0.000	A
2	Entry	1	1	3	269	1002	0.268	271	270	0.4	0.4	5.237	A
			2	1, 2, (3)	366	1002	0.366	366	374	0.5	0.6	5.526	A
		2	1	(1, 2, 3)	635			635	645	0.0	0.0	0.000	A
	Exit	1	1		707			707	709	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	629	691	0.910	626	626	3.1	5.9	33.036	D
			2	(2), 3	283	691	0.410	287	293	0.5	0.6	8.957	A
		2	1	(1, 2, 3)	915			912	931	0.0	1.4	3.402	A
	Exit	1	1		437			437	444	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	67	905	0.074	67	68	0.1	0.1	4.627	A
			2	1, 3	92	905	0.101	92	96	0.1	0.1	4.563	A
		2	1	(1, 2, 3)	159			159	164	0.0	0.0	0.013	A
	Exit	1	1		564			564	575	0.0	0.0	0.000	A
2	Entry	1	1	3	265	1002	0.264	266	270	0.4	0.3	5.421	A
			2	1, 2, (3)	366	1002	0.366	364	370	0.6	0.7	5.391	A
		2	1	(1, 2, 3)	631			631	640	0.0	0.0	0.000	A
	Exit	1	1		732			732	720	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	637	692	0.920	639	635	5.9	6.2	36.386	E
			2	(2), 3	299	692	0.433	301	300	0.6	0.6	9.883	A
		2	1	(1, 2, 3)	932			936	936	1.4	0.7	4.380	A
	Exit	1	1		434			434	443	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	52	948	0.055	52	57	0.1	0.1	4.798	A
			2	1, 3	74	948	0.078	74	80	0.1	0.1	4.262	A
		2	1	(1, 2, 3)	126			126	137	0.0	0.0	0.024	A
	Exit	1	1		470			470	484	0.0	0.0	0.000	A
2	Entry	1	1	3	211	1008	0.209	210	218	0.3	0.3	4.850	A
			2	1, 2, (3)	306	1008	0.303	306	310	0.7	0.5	5.194	A
		2	1	(1, 2, 3)	516			516	527	0.0	0.0	0.000	A
	Exit	1	1		598			598	606	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	552	706	0.782	554	563	6.2	2.8	21.466	C
			2	(2), 3	223	706	0.315	222	224	0.6	0.5	7.135	A
		2	1	(1, 2, 3)	774			775	773	0.7	0.0	0.541	A
	Exit	1	1		348			348	363	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	47	986	0.048	47	49	0.1	0.0	4.476	A
			2	1, 3	62	986	0.062	62	66	0.1	0.1	4.454	A
		2	1	(1, 2, 3)	109			109	115	0.0	0.0	0.005	A
	Exit	1	1		389			389	400	0.0	0.0	0.000	A
2	Entry	1	1	3	188	1012	0.186	190	185	0.3	0.2	4.880	A
			2	1, 2, (3)	256	1012	0.253	256	261	0.5	0.3	4.854	A
		2	1	(1, 2, 3)	445			445	445	0.0	0.0	0.000	A
	Exit	1	1		490			490	506	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	458	717	0.639	460	475	2.8	1.5	12.862	B
			2	(2), 3	168	717	0.234	168	175	0.5	0.3	6.166	A
		2	1	(1, 2, 3)	626			626	644	0.0	0.0	0.046	A
	Exit	1	1		304			304	305	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	45	11	1147	986	0.045	44	47	0.0	0.1	4.168	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	61	15	1147	985	0.062	61	64	0.0	0.1	3.924	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	45	11	-	-	-	45	47	0.0	0.0	0.000	A
				3	61	15	-	-	-	61	64	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	181	45	1033	1012	0.179	180	184	0.0	0.3	4.631	A
			2	1	201	50	1033	1012	0.199	200	200	0.0	0.3	4.775	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	50	13	1033	1012	0.050	50	53	0.0	0.1	4.292	A
		2	1	1	201	50	-	-	-	201	201	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	232	58	-	-	-	232	239	0.0	0.0	0.000	A
3	Entry	1	1	1	188	47	777	717	0.263	188	187	0.0	0.7	12.545	B
				2	281	70	777	718	0.392	283	277	0.0	0.8	11.236	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	165	41	777	718	0.230	164	165	0.0	0.3	6.109	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	188	47	-	-	-	188	190	0.0	0.0	0.000	A
				2	446	112	-	-	-	446	447	0.0	0.0	0.001	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	54	14	1147	953	0.057	54	58	0.1	0.0	4.299	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	75	19	1147	955	0.078	75	79	0.1	0.1	4.420	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	54	14	-	-	-	54	58	0.0	0.0	0.044	A
				3	75	19	-	-	-	75	79	0.0	0.0	0.022	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	225	56	1033	1008	0.223	224	227	0.3	0.4	4.967	A
			2	1	242	61	1033	1008	0.240	242	246	0.3	0.4	5.188	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	68	17	1033	1008	0.068	69	68	0.1	0.0	4.529	A
		2	1	1	242	61	-	-	-	242	247	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	293	73	-	-	-	293	295	0.0	0.0	0.000	A
3	Entry	1	1	1	237	59	777	705	0.336	234	231	0.7	1.5	18.532	C
				2	318	79	777	706	0.450	316	314	0.8	1.6	16.525	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	222	56	777	705	0.315	221	218	0.3	0.5	6.899	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	238	59	-	-	-	237	234	0.0	0.0	0.013	A
				2	540	135	-	-	-	540	536	0.0	0.0	0.011	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	65	16	1147	911	0.071	65	67	0.0	0.1	4.737	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	90	22	1147	913	0.098	92	96	0.1	0.1	4.626	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	65	16	-	-	-	65	68	0.0	0.0	0.023	A
				3	90	22	-	-	-	90	96	0.0	0.0	0.025	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	269	67	1033	1002	0.268	271	270	0.4	0.4	5.237	A
			2	1	291	73	1033	1002	0.291	291	296	0.4	0.4	5.732	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	75	19	1033	1002	0.075	75	78	0.0	0.1	4.637	A
		2	1	1	291	73	-	-	-	291	296	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	344	86	-	-	-	344	348	0.0	0.0	0.000	A
3	Entry	1	1	1	274	69	777	691	0.396	271	278	1.5	2.7	34.358	D
				2	355	89	777	691	0.514	355	348	1.6	3.2	31.982	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	283	71	777	691	0.410	287	293	0.5	0.6	8.957	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	275	69	-	-	-	274	283	0.0	0.4	3.867	A
				2	640	160	-	-	-	638	649	0.0	1.0	3.199	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	67	17	1147	906	0.074	67	68	0.1	0.1	4.627	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	92	23	1147	909	0.101	92	96	0.1	0.1	4.563	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	67	17	-	-	-	67	68	0.0	0.0	0.016	A
				3	92	23	-	-	-	92	96	0.0	0.0	0.010	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	265	66	1033	1002	0.265	266	270	0.4	0.3	5.421	A
			2	1	290	73	1033	1002	0.289	288	293	0.4	0.6	5.564	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	76	19	1033	1001	0.076	76	77	0.1	0.1	4.640	A
		2	1	1	290	73	-	-	-	290	294	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	341	85	-	-	-	341	346	0.0	0.0	0.000	A
3	Entry	1	1	1	276	69	777	692	0.398	275	282	2.7	2.8	37.292	E
				2	361	90	777	692	0.522	364	353	3.2	3.4	35.663	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	299	75	777	692	0.433	301	300	0.6	0.6	9.883	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	275	69	-	-	-	276	282	0.4	0.2	4.624	A
				2	658	164	-	-	-	660	653	1.0	0.5	4.274	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	1147	949	0.055	52	57	0.1	0.1	4.798	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	74	18	1147	950	0.078	74	80	0.1	0.1	4.262	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	-	-	-	52	57	0.0	0.0	0.030	A
				3	74	18	-	-	-	74	80	0.0	0.0	0.019	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	211	53	1033	1008	0.209	210	218	0.3	0.3	4.850	A
			2	1	241	60	1033	1008	0.239	241	245	0.6	0.4	5.311	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	65	16	1033	1008	0.064	65	65	0.1	0.1	4.698	A
		2	1	1	241	60	-	-	-	241	244	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	275	69	-	-	-	275	283	0.0	0.0	0.000	A
3	Entry	1	1	1	229	57	777	706	0.324	230	239	2.8	1.2	23.160	C
				2	323	81	777	706	0.458	324	324	3.4	1.6	20.224	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	223	56	777	706	0.315	222	224	0.6	0.5	7.135	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	229	57	-	-	-	229	232	0.2	0.0	0.613	A
				2	546	136	-	-	-	546	541	0.5	0.0	0.510	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	1147	983	0.048	47	49	0.1	0.0	4.476	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	62	15	1147	985	0.063	62	66	0.1	0.1	4.454	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	-	-	-	47	49	0.0	0.0	0.000	A
				3	62	15	-	-	-	62	66	0.0	0.0	0.009	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	188	47	1033	1012	0.186	190	185	0.3	0.2	4.880	A
			2	1	203	51	1033	1012	0.201	203	206	0.4	0.2	4.924	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	53	13	1033	1012	0.053	53	55	0.1	0.1	4.554	A
		2	1	1	203	51	-	-	-	203	205	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	242	60	-	-	-	242	239	0.0	0.0	0.000	A
3	Entry	1	1	1	182	46	777	717	0.255	185	194	1.2	0.6	13.886	B
				2	275	69	777	717	0.384	275	281	1.6	0.9	12.158	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	168	42	777	717	0.234	168	175	0.5	0.3	6.166	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	182	46	-	-	-	182	191	0.0	0.0	0.039	A
				2	443	111	-	-	-	443	453	0.0	0.0	0.049	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WoD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	7.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.17	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	470	100.000
2		ONE HOUR	✓	585	100.000
3		ONE HOUR	✓	456	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	179	291
	2	117	0	468
	3	183	273	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

From \ To	1	2	3
1	0	10	0
2	20	0	10
3	6	6	0

Cyclist %

From \ To	1	2	3
1	0	0	0
2	0	0	0
3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.35	5.00	0.7	A	426	638
2	0.35	6.27	1.3	A	533	799
3	0.51	10.47	1.5	B	424	636

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	344	86	194	1524	0.225	341	349	230	0.0	0.5	4.164	A
2	440	110	218	1828	0.241	441	450	317	0.0	0.5	5.062	A
3	336	84	84	1057	0.317	340	348	576	0.0	0.7	7.185	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	421	105	254	1595	0.264	422	424	268	0.5	0.4	4.701	A
2	504	126	257	1849	0.273	508	531	418	0.5	0.8	5.514	A
3	425	106	100	1112	0.382	423	413	665	0.7	1.1	8.434	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	513	128	308	1510	0.340	517	516	328	0.4	0.5	4.907	A
2	642	161	315	1820	0.353	642	656	510	0.8	1.2	6.147	A
3	507	127	125	1066	0.476	511	503	832	1.1	1.4	9.346	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	522	131	301	1506	0.347	521	514	342	0.5	0.7	4.998	A
2	645	161	330	1842	0.350	646	666	492	1.2	1.3	6.267	A
3	515	129	130	1002	0.514	513	511	846	1.4	1.5	10.473	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	419	105	252	1517	0.276	419	425	286	0.7	0.4	4.629	A
2	522	130	266	1845	0.283	523	533	406	1.3	0.8	5.406	A
3	420	105	116	1096	0.383	423	426	674	1.5	0.7	7.839	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	336	84	212	1561	0.215	335	354	214	0.4	0.5	4.313	A
2	445	111	208	1825	0.244	443	444	339	0.8	0.7	5.135	A
3	340	85	89	1052	0.323	337	346	562	0.7	0.8	7.232	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	125	1077	0.116	123	130	0.0	0.2	4.173	A
			2	1, 3	219	1077	0.203	218	219	0.0	0.3	4.041	A
		2	1	(1, 2, 3)	344			344	351	0.0	0.0	0.076	A
	Exit	1	1		230			230	227	0.0	0.0	0.000	A
2	Entry	1	1	3	257	960	0.268	257	265	0.0	0.3	5.116	A
			2	1, 2, (3)	183	960	0.190	184	184	0.0	0.2	4.982	A
		2	1	(1, 2, 3)	440			440	452	0.0	0.0	0.000	A
	Exit	1	1		317			317	336	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	271	752	0.360	276	280	0.0	0.6	7.670	A
			2	(2), 3	64	752	0.086	65	68	0.0	0.1	5.169	A
		2	1	(1, 2, 3)	336			336	351	0.0	0.0	0.000	A
	Exit	1	1		576			576	582	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	163	1055	0.155	164	162	0.2	0.2	4.517	A
			2	1, 3	258	1055	0.244	257	261	0.3	0.2	4.628	A
		2	1	(1, 2, 3)	421			421	423	0.0	0.0	0.113	A
	Exit	1	1		268			268	273	0.0	0.0	0.000	A
2	Entry	1	1	3	295	947	0.312	298	307	0.3	0.5	5.785	A
			2	1, 2, (3)	208	947	0.220	209	224	0.2	0.3	5.130	A
		2	1	(1, 2, 3)	504			504	532	0.0	0.0	0.000	A
	Exit	1	1		418			418	412	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	341	747	0.456	338	329	0.6	1.1	9.169	A
			2	(2), 3	84	747	0.113	85	84	0.1	0.0	5.508	A
		2	1	(1, 2, 3)	425			425	415	0.0	0.0	0.000	A
	Exit	1	1		665			665	683	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	200	1035	0.193	202	202	0.2	0.2	4.666	A
			2	1, 3	313	1035	0.303	315	315	0.2	0.3	4.713	A
		2	1	(1, 2, 3)	513			513	516	0.0	0.0	0.211	A
	Exit	1	1		328			328	335	0.0	0.0	0.000	A
2	Entry	1	1	3	377	928	0.407	377	382	0.5	0.7	6.356	A
			2	1, 2, (3)	265	928	0.285	265	274	0.3	0.5	5.844	A
		2	1	(1, 2, 3)	642			642	657	0.0	0.0	0.000	A
	Exit	1	1		510			510	501	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	393	740	0.531	395	395	1.1	1.3	10.368	B
			2	(2), 3	114	740	0.154	116	108	0.0	0.1	5.647	A
		2	1	(1, 2, 3)	507			507	504	0.0	0.0	0.000	A
	Exit	1	1		832			832	839	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	192	1038	0.185	191	192	0.2	0.3	4.791	A
			2	1, 3	330	1038	0.318	330	322	0.3	0.4	4.894	A
		2	1	(1, 2, 3)	522			522	515	0.0	0.0	0.139	A
	Exit	1	1		342			342	343	0.0	0.0	0.000	A
2	Entry	1	1	3	375	923	0.406	372	382	0.7	0.9	6.700	A
			2	1, 2, (3)	270	923	0.293	273	284	0.5	0.3	5.642	A
		2	1	(1, 2, 3)	645			645	666	0.0	0.0	0.009	A
	Exit	1	1		492			492	495	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	399	739	0.540	398	400	1.3	1.2	11.829	B
			2	(2), 3	117	739	0.158	115	110	0.1	0.3	5.606	A
		2	1	(1, 2, 3)	515			515	511	0.0	0.0	0.000	A
	Exit	1	1		846			846	853	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	154	1055	0.146	153	155	0.3	0.2	4.490	A
			2	1, 3	265	1055	0.251	266	269	0.4	0.3	4.611	A
		2	1	(1, 2, 3)	419			419	424	0.0	0.0	0.060	A
	Exit	1	1		286			286	282	0.0	0.0	0.000	A
2	Entry	1	1	3	301	944	0.318	302	309	0.9	0.5	5.570	A
			2	1, 2, (3)	221	944	0.234	221	225	0.3	0.3	5.170	A
		2	1	(1, 2, 3)	522			522	532	0.0	0.0	0.000	A
	Exit	1	1		406			406	410	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	335	743	0.451	338	338	1.2	0.6	8.463	A
			2	(2), 3	85	743	0.114	85	88	0.3	0.1	5.429	A
		2	1	(1, 2, 3)	420			420	423	0.0	0.0	0.000	A
	Exit	1	1		674			674	692	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	128	1070	0.119	127	128	0.2	0.3	4.290	A
			2	1, 3	208	1070	0.195	208	226	0.3	0.2	4.267	A
		2	1	(1, 2, 3)	336			336	354	0.0	0.0	0.039	A
	Exit	1	1		214			214	221	0.0	0.0	0.000	A
2	Entry	1	1	3	264	963	0.274	262	260	0.5	0.5	5.298	A
			2	1, 2, (3)	181	963	0.188	181	184	0.3	0.3	4.897	A
		2	1	(1, 2, 3)	445			445	444	0.0	0.0	0.000	A
	Exit	1	1		339			339	342	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	271	750	0.362	269	272	0.6	0.8	7.729	A
			2	(2), 3	68	750	0.091	69	73	0.1	0.1	5.362	A
		2	1	(1, 2, 3)	340			340	346	0.0	0.0	0.000	A
	Exit	1	1		562			562	582	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	125	31	1147	1075	0.116	123	130	0.0	0.2	4.173	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	219	55	1147	1076	0.203	218	219	0.0	0.3	4.041	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	125	31	-	-	-	125	131	0.0	0.0	0.080	A
				3	219	55	-	-	-	219	220	0.0	0.0	0.074	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	257	64	1033	959	0.268	257	265	0.0	0.3	5.116	A
			2	1	84	21	1033	960	0.087	84	86	0.0	0.2	5.581	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	100	25	1033	961	0.104	101	98	0.0	0.1	4.488	A
		2	1	1	84	21	-	-	-	84	87	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	357	89	-	-	-	357	365	0.0	0.0	0.000	A
3	Entry	1	1	1	144	36	777	753	0.191	147	141	0.0	0.3	7.980	A
				2	128	32	777	752	0.170	129	139	0.0	0.3	7.359	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	64	16	777	751	0.086	65	68	0.0	0.1	5.169	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	144	36	-	-	-	144	142	0.0	0.0	0.000	A
				2	192	48	-	-	-	192	208	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	163	41	1147	1055	0.155	164	162	0.2	0.2	4.517	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	258	64	1147	1056	0.244	257	261	0.3	0.2	4.628	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	163	41	-	-	-	163	162	0.0	0.0	0.138	A
				3	258	64	-	-	-	258	261	0.0	0.0	0.100	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	295	74	1033	946	0.312	298	307	0.3	0.5	5.785	A
			2	1	98	24	1033	948	0.103	100	109	0.2	0.2	5.877	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	111	28	1033	945	0.117	110	115	0.1	0.1	4.480	A
		2	1	1	98	24	-	-	-	98	109	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	406	102	-	-	-	406	423	0.0	0.0	0.000	A
3	Entry	1	1	1	173	43	777	747	0.231	168	164	0.3	0.7	9.730	A
				2	168	42	777	747	0.225	170	165	0.3	0.4	8.609	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	84	21	777	746	0.113	85	84	0.1	0.0	5.508	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	173	43	-	-	-	173	166	0.0	0.0	0.000	A
				2	252	63	-	-	-	252	249	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	200	50	1147	1036	0.193	202	202	0.2	0.2	4.666	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	313	78	1147	1037	0.302	315	315	0.2	0.3	4.713	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	200	50	-	-	-	200	202	0.0	0.0	0.219	A
				3	313	78	-	-	-	313	315	0.0	0.0	0.207	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	377	94	1033	927	0.407	377	382	0.5	0.7	6.356	A
			2	1	125	31	1033	928	0.134	125	131	0.2	0.2	6.766	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	140	35	1033	926	0.151	140	143	0.1	0.3	5.091	A
		2	1	1	125	31	-	-	-	125	132	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	517	129	-	-	-	517	526	0.0	0.0	0.000	A
3	Entry	1	1	1	204	51	777	741	0.275	203	203	0.7	0.7	11.100	B
				2	189	47	777	740	0.255	192	191	0.4	0.6	9.603	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	114	29	777	741	0.154	116	108	0.0	0.1	5.647	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	204	51	-	-	-	204	203	0.0	0.0	0.000	A
				2	303	76	-	-	-	303	301	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	192	48	1147	1038	0.185	191	192	0.2	0.3	4.791	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	330	82	1147	1037	0.318	330	322	0.3	0.4	4.894	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	192	48	-	-	-	192	192	0.0	0.0	0.133	A
				3	330	82	-	-	-	330	323	0.0	0.0	0.143	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	375	94	1033	924	0.406	372	382	0.7	0.9	6.700	A
			2	1	128	32	1033	923	0.139	130	135	0.2	0.1	6.482	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	142	36	1033	925	0.154	144	149	0.3	0.2	4.945	A
		2	1	1	128	32	-	-	-	128	135	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	517	129	-	-	-	517	531	0.0	0.0	0.011	A
3	Entry	1	1	1	212	53	777	738	0.287	212	208	0.7	0.7	12.484	B
				2	186	46	777	738	0.252	186	192	0.6	0.5	11.122	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	117	29	777	739	0.158	115	110	0.1	0.3	5.606	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	212	53	-	-	-	212	208	0.0	0.0	0.000	A
				2	303	76	-	-	-	303	303	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	154	38	1147	1055	0.146	153	155	0.3	0.2	4.490	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	265	66	1147	1054	0.252	266	269	0.4	0.3	4.611	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	154	38	-	-	-	154	155	0.0	0.0	0.040	A
				3	265	66	-	-	-	265	269	0.0	0.0	0.071	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	301	75	1033	943	0.319	302	309	0.9	0.5	5.570	A
			2	1	116	29	1033	943	0.123	116	111	0.1	0.2	5.843	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	1033	943	0.111	106	114	0.2	0.1	4.557	A
		2	1	1	116	29	-	-	-	116	111	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	405	101	-	-	-	405	420	0.0	0.0	0.000	A
3	Entry	1	1	1	167	42	777	743	0.225	171	171	0.7	0.3	8.978	A
				2	168	42	777	743	0.226	168	167	0.5	0.4	7.927	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	85	21	777	744	0.114	85	88	0.3	0.1	5.429	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	167	42	-	-	-	167	170	0.0	0.0	0.000	A
				2	253	63	-	-	-	253	253	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	128	32	1147	1070	0.119	127	128	0.2	0.3	4.290	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	208	52	1147	1070	0.195	208	226	0.3	0.2	4.267	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	128	32	-	-	-	128	129	0.0	0.0	0.048	A
				3	208	52	-	-	-	208	225	0.0	0.0	0.034	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	264	66	1033	964	0.274	262	260	0.5	0.5	5.298	A
			2	1	90	22	1033	962	0.093	89	88	0.2	0.2	5.556	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	92	23	1033	964	0.095	92	96	0.1	0.0	4.338	A
		2	1	1	90	22	-	-	-	90	88	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	356	89	-	-	-	356	356	0.0	0.0	0.000	A
3	Entry	1	1	1	127	32	777	749	0.170	125	132	0.3	0.4	8.136	A
				2	144	36	777	750	0.192	144	140	0.4	0.4	7.345	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	68	17	777	751	0.091	69	73	0.1	0.1	5.362	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	127	32	-	-	-	127	133	0.0	0.0	0.000	A
				2	212	53	-	-	-	212	213	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	50.75	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	50.75	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	149	100.000
2		ONE HOUR	✓	537	100.000
3		ONE HOUR	✓	936	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	66	83
	2	263	0	274
	3	301	635	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	9	4
	2	2	0	18
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.13	4.77	0.3	A	138	206
2	0.31	5.54	1.0	A	488	733
3	0.99	84.01	25.9	F	854	1281

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	112	28	474	1453	0.077	112	115	417	0.0	0.2	3.969	A
2	400	100	63	1894	0.211	398	399	522	0.0	0.7	4.832	A
3	699	175	190	1063	0.657	701	695	271	0.0	2.3	12.092	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	140	35	567	1398	0.100	141	143	499	0.2	0.2	4.470	A
2	474	119	78	1860	0.255	474	486	630	0.7	0.6	5.020	A
3	830	208	233	1090	0.761	833	833	320	2.3	4.3	19.368	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	164	41	674	1333	0.123	165	171	599	0.2	0.1	4.515	A
2	580	145	91	1863	0.311	579	592	747	0.6	1.0	5.537	A
3	1028	257	280	1062	0.968	992	980	390	4.3	17.5	47.062	E

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	168	42	690	1306	0.129	168	171	603	0.1	0.3	4.771	A
2	583	146	95	1860	0.313	583	600	763	1.0	0.9	5.528	A
3	1024	256	289	1031	0.994	1005	1001	390	17.5	25.9	84.013	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	133	33	607	1367	0.097	133	140	522	0.3	0.2	4.582	A
2	482	121	75	1885	0.256	482	489	665	0.9	0.7	5.003	A
3	842	211	238	1105	0.762	891	915	318	25.9	8.5	59.010	F

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	476	1423	0.076	110	117	421	0.2	0.1	4.203	A
2	412	103	63	1879	0.219	413	418	523	0.7	0.6	4.870	A
3	702	176	199	1106	0.635	698	735	276	8.5	2.7	17.696	C

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	49	974	0.050	49	50	0.0	0.1	3.987	A
			2	1, 3	63	974	0.065	63	65	0.0	0.1	3.955	A
		2	1	(1, 2, 3)	112			112	116	0.0	0.0	0.000	A
	Exit	1	1		417			417	418	0.0	0.0	0.000	A
2	Entry	1	1	3	161	1012	0.159	161	158	0.0	0.2	4.865	A
			2	1, 2, (3)	238	1012	0.236	237	241	0.0	0.5	4.813	A
		2	1	(1, 2, 3)	400			400	402	0.0	0.0	0.000	A
	Exit	1	1		522			522	522	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	513	721	0.712	513	508	0.0	2.0	14.155	B
			2	(2), 3	186	721	0.258	187	187	0.0	0.3	6.288	A
		2	1	(1, 2, 3)	699			699	704	0.0	0.0	0.037	A
	Exit	1	1		271			271	270	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	62	940	0.066	63	63	0.1	0.0	4.432	A
			2	1, 3	78	940	0.083	78	80	0.1	0.1	4.487	A
		2	1	(1, 2, 3)	140			140	143	0.0	0.0	0.007	A
	Exit	1	1		499			499	505	0.0	0.0	0.000	A
2	Entry	1	1	3	187	1007	0.186	187	192	0.2	0.3	5.036	A
			2	1, 2, (3)	287	1007	0.285	287	294	0.5	0.3	5.011	A
		2	1	(1, 2, 3)	474			474	486	0.0	0.0	0.000	A
	Exit	1	1		630			630	631	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	582	708	0.821	585	587	2.0	3.7	23.397	C
			2	(2), 3	247	708	0.349	248	245	0.3	0.4	7.630	A
		2	1	(1, 2, 3)	830			829	840	0.0	0.2	0.548	A
	Exit	1	1		320			320	326	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	74	901	0.082	74	76	0.0	0.1	4.586	A
			2	1, 3	90	901	0.100	91	96	0.1	0.1	4.437	A
		2	1	(1, 2, 3)	164			164	171	0.0	0.0	0.014	A
	Exit	1	1		599			599	599	0.0	0.0	0.000	A
2	Entry	1	1	3	233	1002	0.232	233	238	0.3	0.4	5.295	A
			2	1, 2, (3)	347	1002	0.346	347	355	0.3	0.6	5.681	A
		2	1	(1, 2, 3)	580			580	594	0.0	0.0	0.000	A
	Exit	1	1		747			747	745	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	681	694	0.981	669	663	3.7	9.9	44.571	E
			2	(2), 3	323	694	0.465	323	317	0.4	1.0	10.520	B
		2	1	(1, 2, 3)	1028			1004	1007	0.2	6.7	12.863	B
	Exit	1	1		390			390	399	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	73	895	0.081	73	76	0.1	0.1	4.925	A
			2	1, 3	96	895	0.107	95	95	0.1	0.2	4.639	A
		2	1	(1, 2, 3)	168			168	171	0.0	0.0	0.009	A
	Exit	1	1		603			603	614	0.0	0.0	0.000	A
2	Entry	1	1	3	228	1001	0.228	228	237	0.4	0.4	5.314	A
			2	1, 2, (3)	354	1001	0.354	355	363	0.6	0.5	5.653	A
		2	1	(1, 2, 3)	583			583	599	0.0	0.0	0.000	A
	Exit	1	1		763			763	758	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	673	692	0.973	671	670	9.9	10.7	57.244	F
			2	(2), 3	334	692	0.483	334	331	1.0	1.1	11.899	B
		2	1	(1, 2, 3)	1024			1007	1004	6.7	14.1	41.358	E
	Exit	1	1		390			390	399	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	58	926	0.063	58	62	0.1	0.1	4.498	A
			2	1, 3	75	926	0.081	75	77	0.2	0.1	4.644	A
		2	1	(1, 2, 3)	133			133	139	0.0	0.0	0.002	A
	Exit	1	1		522			522	536	0.0	0.0	0.000	A
2	Entry	1	1	3	191	1008	0.189	190	190	0.4	0.3	4.927	A
			2	1, 2, (3)	291	1008	0.289	292	300	0.5	0.4	5.045	A
		2	1	(1, 2, 3)	482			482	489	0.0	0.0	0.000	A
	Exit	1	1		665			665	684	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	614	707	0.869	627	635	10.7	5.6	42.955	E
			2	(2), 3	261	707	0.369	264	280	1.1	0.6	10.018	B
		2	1	(1, 2, 3)	842			875	893	14.1	2.3	27.522	D
	Exit	1	1		318			318	324	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	46	973	0.047	47	52	0.1	0.0	4.331	A
			2	1, 3	63	973	0.064	63	65	0.1	0.0	4.092	A
		2	1	(1, 2, 3)	108			108	117	0.0	0.0	0.008	A
	Exit	1	1		421			421	441	0.0	0.0	0.000	A
2	Entry	1	1	3	164	1012	0.162	166	167	0.3	0.2	4.891	A
			2	1, 2, (3)	248	1012	0.245	247	251	0.4	0.5	4.857	A
		2	1	(1, 2, 3)	412			412	417	0.0	0.0	0.000	A
	Exit	1	1		523			523	549	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	513	718	0.714	509	534	5.6	2.4	19.436	C
			2	(2), 3	189	718	0.264	189	200	0.6	0.4	7.029	A
		2	1	(1, 2, 3)	702			702	721	2.3	0.0	2.132	A
	Exit	1	1		276			276	280	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1147	973	0.050	49	50	0.0	0.1	3.987	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	63	16	1147	973	0.065	63	65	0.0	0.1	3.955	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	-	-	-	49	50	0.0	0.0	0.000	A
				3	63	16	-	-	-	63	65	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	161	40	1033	1011	0.159	161	158	0.0	0.2	4.865	A
			2	1	191	48	1033	1011	0.189	190	194	0.0	0.4	4.864	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	47	12	1033	1013	0.047	47	47	0.0	0.1	4.567	A
		2	1	1	191	48	-	-	-	191	196	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	209	52	-	-	-	209	206	0.0	0.0	0.000	A
3	Entry	1	1	1	226	56	777	721	0.314	227	223	0.0	0.9	14.921	B
				2	287	72	777	721	0.398	287	285	0.0	1.1	13.554	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	186	47	777	721	0.259	187	187	0.0	0.3	6.288	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	226	56	-	-	-	226	227	0.0	0.0	0.036	A
				2	473	118	-	-	-	473	477	0.0	0.0	0.037	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	62	16	1147	941	0.066	63	63	0.1	0.0	4.432	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	78	19	1147	942	0.083	78	80	0.1	0.1	4.487	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	62	16	-	-	-	62	63	0.0	0.0	0.007	A
				3	78	19	-	-	-	78	80	0.0	0.0	0.007	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	187	47	1033	1007	0.186	187	192	0.2	0.3	5.036	A
			2	1	232	58	1033	1007	0.231	233	240	0.4	0.3	5.109	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	54	14	1033	1006	0.054	55	55	0.1	0.1	4.515	A
		2	1	1	232	58	-	-	-	232	239	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	242	60	-	-	-	242	247	0.0	0.0	0.000	A
3	Entry	1	1	1	267	67	777	708	0.377	266	265	0.9	1.9	24.844	C
				2	315	79	777	708	0.445	319	322	1.1	1.8	22.200	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	247	62	777	708	0.349	248	245	0.3	0.4	7.630	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	268	67	-	-	-	267	269	0.0	0.1	0.691	A
				2	563	141	-	-	-	562	571	0.0	0.1	0.480	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	74	18	1147	901	0.082	74	76	0.0	0.1	4.586	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	90	23	1147	902	0.100	91	96	0.1	0.1	4.437	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	74	18	-	-	-	74	76	0.0	0.0	0.013	A
				3	90	23	-	-	-	90	95	0.0	0.0	0.014	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	233	58	1033	1002	0.232	233	238	0.3	0.4	5.295	A
			2	1	280	70	1033	1002	0.280	280	289	0.3	0.5	5.843	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	66	17	1033	1003	0.066	66	66	0.1	0.1	4.855	A
		2	1	1	280	70	-	-	-	280	289	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	300	75	-	-	-	300	305	0.0	0.0	0.000	A
3	Entry	1	1	1	324	81	777	694	0.467	318	310	1.9	4.8	45.881	E
				2	357	89	777	695	0.514	351	352	1.8	5.1	43.416	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	323	81	777	694	0.466	323	317	0.4	1.0	10.520	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	335	84	-	-	-	324	322	0.1	2.4	13.786	B
				2	692	173	-	-	-	680	685	0.1	4.3	12.427	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	1147	896	0.081	73	76	0.1	0.1	4.925	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	96	24	1147	895	0.107	95	95	0.1	0.2	4.639	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	-	-	-	73	76	0.0	0.0	0.007	A
				3	96	24	-	-	-	96	95	0.0	0.0	0.011	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	228	57	1033	1001	0.228	228	237	0.4	0.4	5.314	A
			2	1	288	72	1033	1001	0.288	289	295	0.5	0.4	5.825	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	66	16	1033	1001	0.066	66	68	0.1	0.1	4.790	A
		2	1	1	288	72	-	-	-	288	295	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	294	74	-	-	-	294	304	0.0	0.0	0.000	A
3	Entry	1	1	1	315	79	777	692	0.456	314	318	4.8	5.2	57.895	F
				2	357	89	777	692	0.517	357	352	5.1	5.5	56.654	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	334	84	777	692	0.483	334	331	1.0	1.1	11.899	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	324	81	-	-	-	315	320	2.4	4.6	41.967	E
				2	701	175	-	-	-	692	685	4.3	9.5	41.075	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	58	14	1147	925	0.063	58	62	0.1	0.1	4.498	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	75	19	1147	925	0.081	75	77	0.2	0.1	4.644	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	58	14	-	-	-	58	62	0.0	0.0	0.002	A
				3	75	19	-	-	-	75	77	0.0	0.0	0.002	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	191	48	1033	1008	0.189	190	190	0.4	0.3	4.927	A
			2	1	237	59	1033	1008	0.235	238	243	0.4	0.3	5.123	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	54	14	1033	1007	0.054	54	57	0.1	0.1	4.665	A
		2	1	1	237	59	-	-	-	237	242	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	245	61	-	-	-	245	247	0.0	0.0	0.000	A
3	Entry	1	1	1	279	70	777	707	0.395	284	293	5.2	2.6	44.495	E
				2	335	84	777	707	0.475	343	341	5.5	3.0	41.638	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	261	65	777	706	0.369	264	280	1.1	0.6	10.018	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	268	67	-	-	-	279	283	4.6	0.7	27.841	D
				2	574	144	-	-	-	596	610	9.5	1.6	27.375	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	11	1147	972	0.047	47	52	0.1	0.0	4.331	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	63	16	1147	971	0.064	63	65	0.1	0.0	4.092	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	11	-	-	-	46	52	0.0	0.0	0.007	A
				3	63	16	-	-	-	63	65	0.0	0.0	0.008	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	164	41	1033	1012	0.162	166	167	0.3	0.2	4.891	A
			2	1	200	50	1033	1012	0.198	199	203	0.3	0.4	4.958	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	48	12	1033	1012	0.047	48	47	0.1	0.1	4.352	A
		2	1	1	200	50	-	-	-	200	204	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	212	53	-	-	-	212	214	0.0	0.0	0.000	A
3	Entry	1	1	1	225	56	777	718	0.314	222	237	2.6	1.2	20.686	C
				2	287	72	777	718	0.400	288	297	3.0	1.2	18.439	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	189	47	777	718	0.264	189	200	0.6	0.4	7.029	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	225	56	-	-	-	225	232	0.7	0.0	2.338	A
				2	477	119	-	-	-	477	489	1.6	0.0	2.034	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	6.29	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.29	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	468	100.000
2		ONE HOUR	✓	624	100.000
3		ONE HOUR	✓	419	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	173	295
	2	128	0	496
	3	172	247	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

From \ To	1	2	3
1	0	3	0
2	10	0	4
3	4	4	0

Cyclist %

From \ To	1	2	3
1	0	0	0
2	0	0	0
3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.35	4.90	0.6	A	431	647
2	0.40	5.97	1.4	A	572	858
3	0.45	8.31	1.2	A	388	582

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	368	92	189	1574	0.234	367	363	209	0.0	0.4	4.198	A
2	446	112	238	1925	0.232	448	471	318	0.0	0.6	4.791	A
3	316	79	84	1063	0.297	314	312	602	0.0	0.7	7.164	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	430	108	226	1525	0.282	432	428	274	0.4	0.5	4.449	A
2	560	140	263	1849	0.303	560	569	395	0.6	0.8	5.285	A
3	382	96	115	1139	0.335	385	383	709	0.7	0.7	7.498	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	532	133	273	1524	0.349	535	529	324	0.5	0.6	4.863	A
2	691	173	336	1829	0.378	689	691	472	0.8	1.3	5.911	A
3	454	114	142	1057	0.430	455	459	883	0.7	0.9	8.192	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	491	123	266	1519	0.324	497	518	330	0.6	0.5	4.898	A
2	707	177	319	1786	0.396	707	702	445	1.3	1.4	5.968	A
3	457	114	143	1006	0.454	453	464	883	0.9	1.2	8.312	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	412	103	220	1520	0.271	411	417	279	0.5	0.4	4.418	A
2	565	141	259	1880	0.301	562	569	372	1.4	0.7	5.570	A
3	383	96	114	1047	0.366	385	384	707	1.2	0.5	7.489	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	354	89	202	1580	0.224	355	364	237	0.4	0.4	4.105	A
2	463	116	222	1919	0.241	460	478	336	0.7	0.7	5.087	A
3	337	84	100	1038	0.325	339	330	582	0.5	0.6	6.909	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	127	1078	0.118	129	132	0.0	0.1	3.908	A
			2	1, 3	240	1078	0.223	238	230	0.0	0.3	4.240	A
		2	1	(1, 2, 3)	368			368	364	0.0	0.0	0.076	A
	Exit	1	1		209			209	224	0.0	0.0	0.000	A
2	Entry	1	1	3	264	953	0.277	264	272	0.0	0.3	4.941	A
			2	1, 2, (3)	183	953	0.192	184	198	0.0	0.2	4.580	A
		2	1	(1, 2, 3)	446			446	473	0.0	0.0	0.000	A
	Exit	1	1		318			318	316	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	256	752	0.341	253	257	0.0	0.7	7.536	A
			2	(2), 3	60	752	0.080	61	55	0.0	0.0	5.411	A
		2	1	(1, 2, 3)	316			316	315	0.0	0.0	0.000	A
	Exit	1	1		602			602	605	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	170	1065	0.160	169	161	0.1	0.2	4.067	A
			2	1, 3	261	1065	0.245	263	268	0.3	0.3	4.506	A
		2	1	(1, 2, 3)	430			431	429	0.0	0.0	0.105	A
	Exit	1	1		274			274	278	0.0	0.0	0.000	A
2	Entry	1	1	3	330	945	0.350	332	330	0.3	0.4	5.479	A
			2	1, 2, (3)	230	945	0.243	229	238	0.2	0.5	5.009	A
		2	1	(1, 2, 3)	560			560	570	0.0	0.0	0.000	A
	Exit	1	1		395			395	383	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	307	743	0.413	310	311	0.7	0.5	7.982	A
			2	(2), 3	76	743	0.102	75	72	0.0	0.2	5.425	A
		2	1	(1, 2, 3)	382			382	383	0.0	0.0	0.000	A
	Exit	1	1		709			709	719	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	198	1048	0.189	200	187	0.2	0.2	4.305	A
			2	1, 3	335	1048	0.319	336	342	0.3	0.4	4.855	A
		2	1	(1, 2, 3)	532			533	530	0.0	0.0	0.199	A
	Exit	1	1		324			324	328	0.0	0.0	0.000	A
2	Entry	1	1	3	395	921	0.429	395	394	0.4	0.7	6.347	A
			2	1, 2, (3)	296	921	0.321	294	297	0.5	0.6	5.317	A
		2	1	(1, 2, 3)	691			691	693	0.0	0.0	0.000	A
	Exit	1	1		472			472	460	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	364	735	0.495	365	366	0.5	0.8	8.880	A
			2	(2), 3	91	735	0.124	90	94	0.2	0.2	5.513	A
		2	1	(1, 2, 3)	454			454	460	0.0	0.0	0.000	A
	Exit	1	1		883			883	892	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	178	1050	0.170	179	184	0.2	0.2	4.277	A
			2	1, 3	315	1050	0.300	319	334	0.4	0.3	4.889	A
		2	1	(1, 2, 3)	491			493	518	0.0	0.0	0.223	A
	Exit	1	1		330			330	339	0.0	0.0	0.000	A
2	Entry	1	1	3	404	927	0.436	403	402	0.7	0.8	6.261	A
			2	1, 2, (3)	303	927	0.327	303	299	0.6	0.5	5.566	A
		2	1	(1, 2, 3)	707			707	702	0.0	0.0	0.000	A
	Exit	1	1		445			445	453	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	361	735	0.492	358	370	0.8	1.0	9.092	A
			2	(2), 3	96	735	0.130	95	95	0.2	0.2	5.286	A
		2	1	(1, 2, 3)	457			457	465	0.0	0.0	0.000	A
	Exit	1	1		883			883	892	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	152	1067	0.142	152	153	0.2	0.1	4.072	A
			2	1, 3	260	1067	0.244	259	263	0.3	0.3	4.543	A
		2	1	(1, 2, 3)	412			412	417	0.0	0.0	0.045	A
	Exit	1	1		279			279	272	0.0	0.0	0.000	A
2	Entry	1	1	3	333	946	0.352	331	332	0.8	0.5	5.818	A
			2	1, 2, (3)	232	946	0.245	232	237	0.5	0.2	5.216	A
		2	1	(1, 2, 3)	565			565	566	0.0	0.0	0.000	A
	Exit	1	1		372			372	377	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	314	743	0.422	315	308	1.0	0.4	7.965	A
			2	(2), 3	70	743	0.094	70	77	0.2	0.1	5.581	A
		2	1	(1, 2, 3)	383			383	382	0.0	0.0	0.000	A
	Exit	1	1		707			707	721	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	134	1074	0.125	134	130	0.1	0.1	3.870	A
			2	1, 3	220	1074	0.205	222	234	0.3	0.3	4.209	A
		2	1	(1, 2, 3)	354			354	364	0.0	0.0	0.016	A
	Exit	1	1		237			237	235	0.0	0.0	0.000	A
2	Entry	1	1	3	266	959	0.278	267	272	0.5	0.4	5.508	A
			2	1, 2, (3)	195	959	0.204	194	206	0.2	0.3	4.513	A
		2	1	(1, 2, 3)	463			463	478	0.0	0.0	0.000	A
	Exit	1	1		336			336	327	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	268	747	0.359	269	266	0.4	0.5	7.392	A
			2	(2), 3	69	747	0.093	69	64	0.1	0.1	4.926	A
		2	1	(1, 2, 3)	337			337	331	0.0	0.0	0.000	A
	Exit	1	1		582			582	611	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	1147	1078	0.118	129	132	0.0	0.1	3.908	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	240	60	1147	1078	0.223	238	230	0.0	0.3	4.240	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	-	-	-	127	133	0.0	0.0	0.044	A
				3	240	60	-	-	-	240	232	0.0	0.0	0.093	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	264	66	1033	954	0.277	264	272	0.0	0.3	4.941	A
			2	1	85	21	1033	956	0.089	84	95	0.0	0.2	5.016	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	98	24	1033	956	0.102	99	103	0.0	0.0	4.199	A
		2	1	1	85	21	-	-	-	85	96	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	362	90	-	-	-	362	377	0.0	0.0	0.000	A
3	Entry	1	1	1	128	32	777	751	0.170	125	128	0.0	0.4	7.821	A
				2	129	32	777	752	0.171	128	129	0.0	0.3	7.245	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	60	15	777	750	0.080	61	55	0.0	0.0	5.411	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	128	32	-	-	-	128	130	0.0	0.0	0.000	A
				2	189	47	-	-	-	189	185	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	170	43	1147	1065	0.160	169	161	0.1	0.2	4.067	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	261	65	1147	1065	0.245	263	268	0.3	0.3	4.506	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	170	43	-	-	-	170	161	0.0	0.0	0.086	A
				3	260	65	-	-	-	261	268	0.0	0.0	0.117	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	330	83	1033	945	0.350	332	330	0.3	0.4	5.479	A
			2	1	116	29	1033	943	0.123	115	118	0.2	0.3	5.583	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	114	29	1033	944	0.121	114	121	0.0	0.2	4.490	A
		2	1	1	116	29	-	-	-	116	118	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	445	111	-	-	-	445	452	0.0	0.0	0.000	A
3	Entry	1	1	1	157	39	777	743	0.211	159	161	0.4	0.3	8.367	A
				2	149	37	777	743	0.201	151	150	0.3	0.2	7.569	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	76	19	777	742	0.102	75	72	0.0	0.2	5.425	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	157	39	-	-	-	157	160	0.0	0.0	0.000	A
				2	225	56	-	-	-	225	222	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	198	50	1147	1050	0.189	200	187	0.2	0.2	4.305	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	335	84	1147	1048	0.319	336	342	0.3	0.4	4.855	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	198	50	-	-	-	198	187	0.0	0.0	0.202	A
				3	334	84	-	-	-	335	343	0.0	0.0	0.197	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	395	99	1033	921	0.429	395	394	0.4	0.7	6.347	A
			2	1	143	36	1033	922	0.155	142	141	0.3	0.3	5.895	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	153	38	1033	923	0.166	153	156	0.2	0.2	4.820	A
		2	1	1	143	36	-	-	-	143	141	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	548	137	-	-	-	548	552	0.0	0.0	0.000	A
3	Entry	1	1	1	181	45	777	735	0.246	183	187	0.3	0.4	9.437	A
				2	183	46	777	735	0.249	183	179	0.2	0.4	8.291	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	91	23	777	736	0.123	90	94	0.2	0.2	5.513	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	181	45	-	-	-	181	187	0.0	0.0	0.000	A
				2	274	68	-	-	-	274	273	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	178	45	1147	1050	0.170	179	184	0.2	0.2	4.277	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	315	79	1147	1050	0.300	319	334	0.4	0.3	4.889	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	178	45	-	-	-	178	184	0.0	0.0	0.209	A
				3	313	78	-	-	-	315	334	0.0	0.0	0.230	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	404	101	1033	927	0.435	403	402	0.7	0.8	6.261	A
			2	1	141	35	1033	926	0.152	143	143	0.3	0.2	6.175	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	162	41	1033	925	0.175	161	156	0.2	0.3	5.039	A
		2	1	1	141	35	-	-	-	141	143	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	566	142	-	-	-	566	559	0.0	0.0	0.000	A
3	Entry	1	1	1	189	47	777	734	0.258	188	195	0.4	0.6	9.609	A
				2	172	43	777	734	0.234	171	174	0.4	0.4	8.509	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	96	24	777	735	0.130	95	95	0.2	0.2	5.286	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	189	47	-	-	-	189	196	0.0	0.0	0.000	A
				2	268	67	-	-	-	268	269	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	152	38	1147	1069	0.142	152	153	0.2	0.1	4.072	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	260	65	1147	1068	0.243	259	263	0.3	0.3	4.543	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	152	38	-	-	-	152	153	0.0	0.0	0.042	A
				3	260	65	-	-	-	260	263	0.0	0.0	0.047	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	333	83	1033	945	0.353	331	332	0.8	0.5	5.818	A
			2	1	115	29	1033	944	0.121	114	112	0.2	0.1	5.654	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	117	29	1033	944	0.124	117	125	0.3	0.2	4.839	A
		2	1	1	115	29	-	-	-	115	111	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	451	113	-	-	-	451	455	0.0	0.0	0.000	A
3	Entry	1	1	1	165	41	777	743	0.223	165	160	0.6	0.3	8.694	A
				2	148	37	777	742	0.199	150	147	0.4	0.2	7.176	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	70	17	777	742	0.094	70	77	0.2	0.1	5.581	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	165	41	-	-	-	165	159	0.0	0.0	0.000	A
				2	218	54	-	-	-	218	223	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	134	34	1147	1075	0.125	134	130	0.1	0.1	3.870	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	220	55	1147	1075	0.205	222	234	0.3	0.3	4.209	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	134	34	-	-	-	134	130	0.0	0.0	0.010	A
				3	220	55	-	-	-	220	234	0.0	0.0	0.019	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	266	67	1033	960	0.278	267	272	0.5	0.4	5.508	A
			2	1	100	25	1033	962	0.104	100	101	0.1	0.1	5.029	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	96	24	1033	959	0.100	94	105	0.2	0.2	4.049	A
		2	1	1	100	25	-	-	-	100	101	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	362	91	-	-	-	362	377	0.0	0.0	0.000	A
3	Entry	1	1	1	137	34	777	747	0.183	137	134	0.3	0.3	7.727	A
				2	131	33	777	747	0.176	133	132	0.2	0.2	7.052	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	777	747	0.093	69	64	0.1	0.1	4.926	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	137	34	-	-	-	137	135	0.0	0.0	0.000	A
				2	201	50	-	-	-	201	196	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WoD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	95.46	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	95.46	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	174	100.000
2		ONE HOUR	✓	605	100.000
3		ONE HOUR	✓	988	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	48	126
	2	213	0	392
	3	398	590	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	6	6
	2	4	0	8
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.16	4.85	0.4	A	161	241
2	0.35	5.47	1.1	A	555	832
3	1.11	166.82	56.3	F	904	1355

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	131	33	440	1265	0.104	132	131	455	0.0	0.1	4.093	A
2	455	114	91	1965	0.232	458	464	481	0.0	0.5	4.723	A
3	735	184	162	1018	0.722	732	726	387	0.0	3.2	14.086	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	148	37	526	1273	0.116	149	160	548	0.1	0.1	4.469	A
2	536	134	107	1953	0.274	538	549	568	0.5	0.7	4.894	A
3	886	222	187	1035	0.856	886	876	457	3.2	6.5	25.289	D

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	201	50	596	1233	0.163	200	201	632	0.1	0.2	4.797	A
2	670	167	145	1913	0.350	669	673	651	0.7	1.1	5.387	A
3	1085	271	236	978	1.110	991	984	577	6.5	31.5	74.606	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	193	48	605	1254	0.154	191	198	649	0.2	0.4	4.853	A
2	664	166	138	1951	0.340	665	674	658	1.1	1.0	5.474	A
3	1098	274	240	1013	1.083	1014	1002	563	31.5	56.3	166.816	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	158	39	591	1244	0.127	158	160	592	0.4	0.2	4.647	A
2	547	137	116	1947	0.281	546	555	633	1.0	0.8	5.141	A
3	884	221	189	1024	0.863	993	1000	473	56.3	31.3	160.648	F

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	133	33	463	1329	0.100	132	138	482	0.2	0.2	4.563	A
2	457	114	95	1967	0.232	455	458	500	0.8	0.8	4.603	A
3	734	184	162	1066	0.689	783	843	388	31.3	6.7	58.730	F

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	42	987	0.042	42	37	0.0	0.1	4.009	A
			2	1, 3	90	987	0.091	91	94	0.0	0.1	4.120	A
		2	1	(1, 2, 3)	131			131	132	0.0	0.0	0.004	A
	Exit	1	1		455			455	454	0.0	0.0	0.000	A
2	Entry	1	1	3	223	1002	0.222	224	226	0.0	0.3	4.728	A
			2	1, 2, (3)	233	1002	0.232	234	238	0.0	0.2	4.718	A
		2	1	(1, 2, 3)	455			455	466	0.0	0.0	0.000	A
	Exit	1	1		481			481	473	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	557	729	0.763	552	545	0.0	2.9	16.411	C
			2	(2), 3	179	729	0.246	180	180	0.0	0.3	6.302	A
		2	1	(1, 2, 3)	735			736	738	0.0	0.0	0.160	A
	Exit	1	1		387			387	395	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	42	955	0.044	43	45	0.1	0.0	4.367	A
			2	1, 3	106	955	0.111	107	115	0.1	0.1	4.468	A
		2	1	(1, 2, 3)	148			148	160	0.0	0.0	0.030	A
	Exit	1	1		548			548	545	0.0	0.0	0.000	A
2	Entry	1	1	3	259	997	0.260	262	268	0.3	0.3	4.909	A
			2	1, 2, (3)	276	997	0.277	276	281	0.2	0.3	4.880	A
		2	1	(1, 2, 3)	536			536	550	0.0	0.0	0.000	A
	Exit	1	1		568			568	569	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	657	722	0.911	656	641	2.9	5.4	28.775	D
			2	(2), 3	231	722	0.320	230	234	0.3	0.5	7.073	A
		2	1	(1, 2, 3)	886			888	887	0.0	0.5	2.173	A
	Exit	1	1		457			457	471	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	55	930	0.059	55	55	0.0	0.1	4.498	A
			2	1, 3	145	930	0.156	145	146	0.1	0.1	4.820	A
		2	1	(1, 2, 3)	201			201	201	0.0	0.0	0.064	A
	Exit	1	1		632			632	630	0.0	0.0	0.000	A
2	Entry	1	1	3	328	984	0.333	328	328	0.3	0.6	5.343	A
			2	1, 2, (3)	342	984	0.347	341	345	0.3	0.6	5.428	A
		2	1	(1, 2, 3)	670			670	675	0.0	0.0	0.000	A
	Exit	1	1		651			651	649	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	702	707	0.993	690	687	5.4	12.5	54.758	F
			2	(2), 3	303	707	0.428	301	297	0.5	0.9	10.068	B
		2	1	(1, 2, 3)	1085			1005	1014	0.5	18.1	32.232	D
	Exit	1	1		577			577	579	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	54	927	0.059	53	54	0.1	0.2	4.601	A
			2	1, 3	139	927	0.150	138	144	0.1	0.2	4.893	A
		2	1	(1, 2, 3)	193			193	199	0.0	0.0	0.040	A
	Exit	1	1		649			649	642	0.0	0.0	0.000	A
2	Entry	1	1	3	319	987	0.324	319	326	0.6	0.5	5.385	A
			2	1, 2, (3)	345	987	0.349	346	348	0.6	0.5	5.555	A
		2	1	(1, 2, 3)	664			664	674	0.0	0.0	0.000	A
	Exit	1	1		658			658	652	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	710	706	1.006	707	704	12.5	13.4	66.671	F
			2	(2), 3	311	706	0.440	307	298	0.9	1.2	11.103	B
		2	1	(1, 2, 3)	1098			1021	1006	18.1	41.7	116.412	F
	Exit	1	1		563			563	579	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	42	932	0.045	42	44	0.2	0.0	4.364	A
			2	1, 3	116	932	0.124	116	116	0.2	0.2	4.724	A
		2	1	(1, 2, 3)	158			158	159	0.0	0.0	0.020	A
	Exit	1	1		592			592	596	0.0	0.0	0.000	A
2	Entry	1	1	3	268	994	0.270	268	271	0.5	0.4	5.138	A
			2	1, 2, (3)	279	994	0.281	278	284	0.5	0.4	5.145	A
		2	1	(1, 2, 3)	547			547	554	0.0	0.0	0.000	A
	Exit	1	1		633			633	641	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	689	721	0.955	707	709	13.4	10.6	62.460	F
			2	(2), 3	283	721	0.393	287	292	1.2	0.6	11.388	B
		2	1	(1, 2, 3)	884			972	987	41.7	20.1	113.903	F
	Exit	1	1		473			473	478	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	38	978	0.039	37	38	0.0	0.1	4.033	A
			2	1, 3	95	978	0.097	95	100	0.2	0.2	4.708	A
		2	1	(1, 2, 3)	133			133	138	0.0	0.0	0.042	A
	Exit	1	1		482			482	502	0.0	0.0	0.000	A
2	Entry	1	1	3	225	1001	0.225	224	226	0.4	0.5	4.675	A
			2	1, 2, (3)	232	1001	0.232	231	233	0.4	0.3	4.534	A
		2	1	(1, 2, 3)	457			457	458	0.0	0.0	0.000	A
	Exit	1	1		500			500	537	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	574	729	0.787	589	622	10.6	3.8	37.087	E
			2	(2), 3	194	729	0.266	194	220	0.6	0.4	8.520	A
		2	1	(1, 2, 3)	734			768	814	20.1	2.5	31.711	D
	Exit	1	1		388			388	399	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	10	1147	987	0.042	42	37	0.0	0.1	4.009	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	90	22	1147	988	0.091	91	94	0.0	0.1	4.120	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	10	-	-	-	42	38	0.0	0.0	0.000	A
				3	90	22	-	-	-	90	94	0.0	0.0	0.006	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	223	56	1033	1002	0.222	224	226	0.0	0.3	4.728	A
			2	1	161	40	1033	1003	0.160	162	163	0.0	0.2	4.992	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	72	18	1033	1003	0.072	72	75	0.0	0.1	4.105	A
		2	1	1	161	40	-	-	-	161	164	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	295	74	-	-	-	295	303	0.0	0.0	0.000	A
3	Entry	1	1	1	296	74	777	729	0.406	293	290	0.0	1.7	17.290	C
				2	260	65	777	729	0.357	259	255	0.0	1.1	15.404	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	179	45	777	729	0.246	180	180	0.0	0.3	6.302	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	296	74	-	-	-	296	297	0.0	0.0	0.181	A
				2	439	110	-	-	-	439	441	0.0	0.0	0.146	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	11	1147	956	0.044	43	45	0.1	0.0	4.367	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	106	27	1147	956	0.111	107	115	0.1	0.1	4.468	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	11	-	-	-	42	45	0.0	0.0	0.012	A
				3	106	27	-	-	-	106	115	0.0	0.0	0.036	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	259	65	1033	997	0.260	262	268	0.3	0.3	4.909	A
			2	1	187	47	1033	997	0.188	187	193	0.2	0.3	5.110	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	89	22	1033	996	0.089	89	88	0.1	0.1	4.351	A
		2	1	1	187	47	-	-	-	187	193	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	349	87	-	-	-	349	356	0.0	0.0	0.000	A
3	Entry	1	1	1	364	91	777	722	0.505	361	352	1.7	3.1	29.378	D
				2	293	73	777	722	0.406	296	289	1.1	2.3	28.042	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	231	58	777	722	0.319	230	234	0.3	0.5	7.073	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	364	91	-	-	-	364	358	0.0	0.2	2.128	A
				2	522	131	-	-	-	524	529	0.0	0.3	2.203	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	1147	929	0.059	55	55	0.0	0.1	4.498	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	145	36	1147	930	0.156	145	146	0.1	0.1	4.820	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	-	-	-	55	55	0.0	0.0	0.019	A
				3	145	36	-	-	-	145	146	0.0	0.0	0.081	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	328	82	1033	985	0.333	328	328	0.3	0.6	5.343	A
			2	1	237	59	1033	985	0.241	236	240	0.3	0.4	5.748	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	1033	984	0.106	105	105	0.1	0.1	4.670	A
		2	1	1	237	59	-	-	-	237	241	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	433	108	-	-	-	433	434	0.0	0.0	0.000	A
3	Entry	1	1	1	402	100	777	707	0.568	396	390	3.1	7.3	55.396	F
				2	300	75	777	707	0.424	295	297	2.3	5.2	53.916	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	303	76	777	707	0.428	301	297	0.5	0.9	10.068	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	436	109	-	-	-	402	407	0.2	7.5	33.315	D
				2	650	162	-	-	-	603	607	0.3	10.6	31.504	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	54	14	1147	927	0.059	53	54	0.1	0.2	4.601	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	139	35	1147	924	0.150	138	144	0.1	0.2	4.893	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	54	14	-	-	-	54	54	0.0	0.0	0.049	A
				3	139	35	-	-	-	139	144	0.0	0.0	0.037	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	319	80	1033	987	0.324	319	326	0.6	0.5	5.385	A
			2	1	240	60	1033	987	0.243	240	239	0.4	0.4	5.955	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	1033	986	0.106	105	109	0.1	0.1	4.635	A
		2	1	1	240	60	-	-	-	240	239	0.0	0.0	0.001	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	424	106	-	-	-	424	435	0.0	0.0	0.000	A
3	Entry	1	1	1	408	102	777	706	0.578	409	403	7.3	7.7	66.752	F
				2	302	76	777	706	0.428	297	301	5.2	5.8	66.563	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	311	78	777	706	0.440	307	298	0.9	1.2	11.103	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	442	111	-	-	-	408	405	7.5	16.6	117.523	F
				2	655	164	-	-	-	613	601	10.6	25.1	115.668	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	10	1147	929	0.045	42	44	0.2	0.0	4.364	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	116	29	1147	931	0.124	116	116	0.2	0.2	4.724	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	10	-	-	-	42	43	0.0	0.0	0.025	A
				3	116	29	-	-	-	116	116	0.0	0.0	0.018	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	268	67	1033	994	0.270	268	271	0.5	0.4	5.138	A
			2	1	190	47	1033	995	0.191	189	193	0.4	0.2	5.472	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	89	22	1033	994	0.090	89	91	0.1	0.2	4.425	A
		2	1	1	190	47	-	-	-	190	193	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	358	89	-	-	-	358	362	0.0	0.0	0.000	A
3	Entry	1	1	1	389	97	777	721	0.540	403	403	7.7	5.9	62.696	F
				2	300	75	777	721	0.415	304	306	5.8	4.7	62.150	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	283	71	777	721	0.393	287	292	1.2	0.6	11.388	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	352	88	-	-	-	389	396	16.6	8.1	115.384	F
				2	532	133	-	-	-	583	591	25.1	12.0	112.909	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	9	1147	974	0.039	37	38	0.0	0.1	4.033	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	95	24	1147	976	0.097	95	100	0.2	0.2	4.708	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	9	-	-	-	38	38	0.0	0.0	0.013	A
				3	95	24	-	-	-	95	100	0.0	0.0	0.053	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	225	56	1033	1001	0.225	224	226	0.4	0.5	4.675	A
			2	1	164	41	1033	1001	0.163	162	159	0.2	0.3	4.743	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	69	17	1033	1001	0.069	69	73	0.2	0.1	4.067	A
		2	1	1	164	41	-	-	-	164	159	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	294	73	-	-	-	294	299	0.0	0.0	0.000	A
3	Entry	1	1	1	312	78	777	729	0.429	320	343	5.9	2.2	38.452	E
				2	261	65	777	729	0.359	269	279	4.7	1.5	35.409	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	194	49	777	729	0.267	194	220	0.6	0.4	8.520	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	299	75	-	-	-	312	329	8.1	1.1	32.111	D
				2	435	109	-	-	-	456	486	12.0	1.4	31.439	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WoD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	14.10	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	14.10	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	488	100.000
2		ONE HOUR	✓	656	100.000
3		ONE HOUR	✓	868	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	164	324
	2	89	0	567
	3	260	608	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	2	0
	2	7	0	4
	3	3	2	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.44	6.34	1.1	A	451	676
2	0.42	6.23	1.6	A	599	899
3	0.84	24.50	6.3	C	789	1184

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	377	94	453	1342	0.281	377	370	259	0.0	0.5	4.679	A
2	497	124	250	1835	0.271	496	492	580	0.0	0.7	4.962	A
3	643	161	66	1155	0.557	646	648	679	0.0	1.8	9.407	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	431	108	544	1338	0.322	429	437	313	0.5	0.6	5.096	A
2	576	144	282	1805	0.319	580	595	692	0.7	0.8	5.360	A
3	782	195	77	1139	0.686	779	791	784	1.8	2.8	12.707	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	540	135	656	1232	0.438	538	541	383	0.6	1.1	6.191	A
2	726	181	355	1748	0.415	723	732	839	0.8	1.6	6.096	A
3	932	233	96	1159	0.805	942	941	982	2.8	5.2	19.896	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	546	137	674	1248	0.438	548	547	386	1.1	0.9	6.343	A
2	717	179	365	1739	0.412	721	730	857	1.6	1.0	6.231	A
3	959	240	96	1135	0.845	964	960	990	5.2	6.3	24.497	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	441	110	542	1340	0.329	442	446	307	0.9	0.6	5.194	A
2	585	146	299	1847	0.317	586	599	685	1.0	1.0	5.611	A
3	768	192	80	1146	0.670	770	798	805	6.3	3.2	14.548	B

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	369	92	451	1374	0.268	367	377	263	0.6	0.6	4.735	A
2	496	124	246	1847	0.269	495	500	572	1.0	0.6	4.965	A
3	650	162	69	1125	0.578	646	664	673	3.2	1.8	10.248	B

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	127	982	0.130	127	124	0.0	0.2	4.364	A
			2	1, 3	250	982	0.254	250	246	0.0	0.3	4.736	A
		2	1	(1, 2, 3)	377			377	372	0.0	0.0	0.064	A
	Exit	1	1		259			259	257	0.0	0.0	0.000	A
2	Entry	1	1	3	308	950	0.325	307	307	0.0	0.5	5.231	A
			2	1, 2, (3)	188	950	0.198	188	185	0.0	0.2	4.512	A
		2	1	(1, 2, 3)	497			497	495	0.0	0.0	0.000	A
	Exit	1	1		580			580	581	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	473	757	0.625	476	477	0.0	1.5	10.732	B
			2	(2), 3	170	757	0.225	171	172	0.0	0.3	5.732	A
		2	1	(1, 2, 3)	643			643	655	0.0	0.0	0.001	A
	Exit	1	1		679			679	673	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	148	949	0.156	148	151	0.2	0.2	4.441	A
			2	1, 3	282	949	0.297	282	287	0.3	0.4	5.277	A
		2	1	(1, 2, 3)	431			431	438	0.0	0.0	0.103	A
	Exit	1	1		313			313	317	0.0	0.0	0.000	A
2	Entry	1	1	3	350	939	0.373	353	365	0.5	0.5	5.743	A
			2	1, 2, (3)	226	939	0.241	227	230	0.2	0.3	4.748	A
		2	1	(1, 2, 3)	576			576	596	0.0	0.0	0.000	A
	Exit	1	1		692			692	704	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	563	754	0.747	563	566	1.5	2.3	15.116	C
			2	(2), 3	218	754	0.289	217	225	0.3	0.4	6.358	A
		2	1	(1, 2, 3)	782			781	795	0.0	0.1	0.071	A
	Exit	1	1		784			784	802	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	182	908	0.200	183	184	0.2	0.2	5.142	A
			2	1, 3	357	908	0.394	355	357	0.4	0.7	6.037	A
		2	1	(1, 2, 3)	540			539	542	0.0	0.2	0.441	A
	Exit	1	1		383			383	380	0.0	0.0	0.000	A
2	Entry	1	1	3	437	915	0.478	435	441	0.5	1.1	6.628	A
			2	1, 2, (3)	288	915	0.315	288	291	0.3	0.5	5.279	A
		2	1	(1, 2, 3)	726			726	735	0.0	0.0	0.000	A
	Exit	1	1		839			839	841	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	648	748	0.866	658	652	2.3	4.4	24.481	C
			2	(2), 3	284	748	0.379	284	288	0.4	0.6	7.520	A
		2	1	(1, 2, 3)	932			932	950	0.1	0.2	0.599	A
	Exit	1	1		982			982	992	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	182	901	0.202	183	183	0.2	0.2	5.045	A
			2	1, 3	364	901	0.404	365	364	0.7	0.6	6.285	A
		2	1	(1, 2, 3)	546			546	547	0.2	0.1	0.476	A
	Exit	1	1		386			386	388	0.0	0.0	0.000	A
2	Entry	1	1	3	432	911	0.475	437	442	1.1	0.6	6.834	A
			2	1, 2, (3)	284	911	0.312	284	288	0.5	0.5	5.304	A
		2	1	(1, 2, 3)	717			717	727	0.0	0.0	0.000	A
	Exit	1	1		857			857	853	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	652	748	0.871	659	654	4.4	5.0	29.246	D
			2	(2), 3	303	748	0.404	304	306	0.6	0.8	8.210	A
		2	1	(1, 2, 3)	959			954	963	0.2	0.6	1.892	A
	Exit	1	1		990			990	995	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	143	949	0.150	143	149	0.2	0.2	4.610	A
			2	1, 3	298	949	0.314	299	298	0.6	0.4	5.269	A
		2	1	(1, 2, 3)	441			441	446	0.1	0.0	0.145	A
	Exit	1	1		307			307	320	0.0	0.0	0.000	A
2	Entry	1	1	3	365	933	0.391	363	368	0.6	0.7	5.955	A
			2	1, 2, (3)	221	933	0.236	222	231	0.5	0.3	5.055	A
		2	1	(1, 2, 3)	585			585	599	0.0	0.0	0.000	A
	Exit	1	1		685			685	709	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	550	753	0.730	550	570	5.0	2.7	17.156	C
			2	(2), 3	218	753	0.290	220	228	0.8	0.4	6.680	A
		2	1	(1, 2, 3)	768			768	787	0.6	0.1	0.542	A
	Exit	1	1		805			805	815	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	121	983	0.123	120	127	0.2	0.2	4.273	A
			2	1, 3	248	983	0.252	246	251	0.4	0.4	4.875	A
		2	1	(1, 2, 3)	369			369	377	0.0	0.0	0.060	A
	Exit	1	1		263			263	270	0.0	0.0	0.000	A
2	Entry	1	1	3	300	951	0.316	299	306	0.7	0.4	5.236	A
			2	1, 2, (3)	196	951	0.206	196	194	0.3	0.2	4.536	A
		2	1	(1, 2, 3)	496			496	498	0.0	0.0	0.000	A
	Exit	1	1		572			572	588	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	485	756	0.641	480	492	2.7	1.6	11.704	B
			2	(2), 3	165	756	0.218	165	172	0.4	0.2	6.108	A
		2	1	(1, 2, 3)	650			650	659	0.1	0.0	0.039	A
	Exit	1	1		673			673	683	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	1147	983	0.129	127	124	0.0	0.2	4.364	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	250	62	1147	982	0.254	250	246	0.0	0.3	4.736	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	-	-	-	127	125	0.0	0.0	0.038	A
				3	250	62	-	-	-	250	247	0.0	0.0	0.077	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	308	77	1033	949	0.325	307	307	0.0	0.5	5.231	A
			2	1	66	17	1033	950	0.070	66	65	0.0	0.1	4.897	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	122	31	1033	949	0.129	122	120	0.0	0.1	4.310	A
		2	1	1	66	17	-	-	-	66	66	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	430	108	-	-	-	430	429	0.0	0.0	0.000	A
3	Entry	1	1	1	191	48	777	757	0.253	193	191	0.0	0.6	11.482	B
				2	282	70	777	757	0.372	283	285	0.0	0.9	10.232	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	170	43	777	757	0.225	171	172	0.0	0.3	5.732	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	191	48	-	-	-	191	194	0.0	0.0	0.001	A
				2	452	113	-	-	-	452	462	0.0	0.0	0.001	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	148	37	1147	949	0.156	148	151	0.2	0.2	4.441	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	282	71	1147	949	0.297	282	287	0.3	0.4	5.277	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	148	37	-	-	-	148	151	0.0	0.0	0.059	A
				3	282	71	-	-	-	282	287	0.0	0.0	0.126	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	350	87	1033	938	0.373	353	365	0.5	0.5	5.743	A
			2	1	77	19	1033	938	0.082	77	80	0.1	0.1	5.311	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	149	37	1033	939	0.159	149	150	0.1	0.2	4.460	A
		2	1	1	77	19	-	-	-	77	80	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	499	125	-	-	-	499	516	0.0	0.0	0.000	A
3	Entry	1	1	1	235	59	777	754	0.311	235	237	0.6	1.0	16.016	C
				2	328	82	777	754	0.435	327	328	0.9	1.3	14.472	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	218	55	777	754	0.289	217	225	0.3	0.4	6.358	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	235	59	-	-	-	235	239	0.0	0.0	0.074	A
				2	547	137	-	-	-	546	556	0.0	0.1	0.070	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	182	45	1147	908	0.200	183	184	0.2	0.2	5.142	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	357	89	1147	907	0.394	355	357	0.4	0.7	6.037	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	182	46	-	-	-	182	184	0.0	0.1	0.332	A
				3	358	89	-	-	-	357	358	0.0	0.1	0.496	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	437	109	1033	915	0.478	435	441	0.5	1.1	6.628	A
			2	1	98	24	1033	915	0.107	96	97	0.1	0.3	5.989	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	191	48	1033	915	0.208	192	194	0.2	0.3	4.930	A
		2	1	1	98	24	-	-	-	98	98	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	628	157	-	-	-	628	637	0.0	0.0	0.000	A
3	Entry	1	1	1	280	70	777	748	0.375	287	283	1.0	2.0	25.875	D
				2	368	92	777	748	0.492	371	370	1.3	2.4	23.424	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	284	71	777	748	0.380	284	288	0.4	0.6	7.520	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	280	70	-	-	-	280	287	0.0	0.0	0.608	A
				2	653	163	-	-	-	652	663	0.1	0.1	0.595	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	182	46	1147	900	0.202	183	183	0.2	0.2	5.045	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	364	91	1147	902	0.404	365	364	0.7	0.6	6.285	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	182	46	-	-	-	182	183	0.1	0.0	0.348	A
				3	364	91	-	-	-	364	364	0.1	0.0	0.539	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	432	108	1033	911	0.474	437	442	1.1	0.6	6.834	A
			2	1	97	24	1033	911	0.107	96	98	0.3	0.3	5.930	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	187	47	1033	912	0.205	188	190	0.3	0.2	4.988	A
		2	1	1	97	24	-	-	-	97	98	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	620	155	-	-	-	620	629	0.0	0.0	0.000	A
3	Entry	1	1	1	286	72	777	749	0.382	290	290	2.0	2.4	30.984	D
				2	366	91	777	748	0.489	370	364	2.4	2.6	27.875	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	303	76	777	748	0.404	304	306	0.6	0.8	8.210	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	287	72	-	-	-	286	291	0.0	0.2	2.054	A
				2	672	168	-	-	-	668	672	0.1	0.4	1.823	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	1147	948	0.151	143	149	0.2	0.2	4.610	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	298	74	1147	949	0.314	299	298	0.6	0.4	5.269	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	-	-	-	143	149	0.0	0.0	0.076	A
				3	298	75	-	-	-	298	297	0.0	0.0	0.179	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	365	91	1033	934	0.391	363	368	0.6	0.7	5.955	A
			2	1	78	20	1033	934	0.084	80	82	0.3	0.1	5.599	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	142	36	1033	935	0.152	143	149	0.2	0.2	4.767	A
		2	1	1	78	20	-	-	-	78	81	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	507	127	-	-	-	507	517	0.0	0.0	0.000	A
3	Entry	1	1	1	226	57	777	753	0.300	228	238	2.4	1.0	18.250	C
				2	324	81	777	754	0.430	323	332	2.6	1.6	16.389	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	218	55	777	754	0.290	220	228	0.8	0.4	6.680	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	226	57	-	-	-	226	232	0.2	0.0	0.686	A
				2	542	136	-	-	-	542	555	0.4	0.1	0.483	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	121	30	1147	981	0.123	120	127	0.2	0.2	4.273	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	248	62	1147	982	0.252	246	251	0.4	0.4	4.875	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	121	30	-	-	-	121	126	0.0	0.0	0.046	A
				3	248	62	-	-	-	248	251	0.0	0.0	0.067	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	300	75	1033	950	0.316	299	306	0.7	0.4	5.236	A
			2	1	69	17	1033	951	0.072	69	67	0.1	0.1	5.090	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	127	32	1033	951	0.134	127	126	0.2	0.1	4.250	A
		2	1	1	69	17	-	-	-	69	67	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	427	107	-	-	-	427	431	0.0	0.0	0.000	A
3	Entry	1	1	1	197	49	777	757	0.260	194	203	1.0	0.8	12.521	B
				2	288	72	777	756	0.381	286	289	1.6	0.8	11.137	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	165	41	777	756	0.218	165	172	0.4	0.2	6.108	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	197	49	-	-	-	197	201	0.0	0.0	0.057	A
				2	453	113	-	-	-	453	458	0.1	0.0	0.031	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	Arm 3	Arm 3: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	135.07	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	135.07	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	187	100.000
2		ONE HOUR	✓	569	100.000
3		ONE HOUR	✓	1035	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	55	132
	2	210	0	359
	3	406	629	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	6	5
	2	4	0	9
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.17	4.84	0.4	A	173	259
2	0.33	5.28	0.8	A	518	777
3	1.15	229.49	74.3	F	951	1426

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	147	37	474	1323	0.111	147	144	462	0.0	0.2	4.220	A
2	425	106	103	1920	0.221	423	426	518	0.0	0.7	4.723	A
3	782	195	158	1042	0.750	778	766	368	0.0	3.9	15.102	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	169	42	562	1293	0.131	168	173	560	0.2	0.3	4.556	A
2	499	125	117	1937	0.257	498	513	613	0.7	0.8	4.891	A
3	921	230	190	1030	0.895	932	921	424	3.9	8.1	31.328	D

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	206	51	626	1239	0.166	206	211	627	0.3	0.3	4.758	A
2	627	157	147	1917	0.327	630	640	685	0.8	0.8	5.256	A
3	1142	285	232	1025	1.114	1021	1014	544	8.1	41.4	94.730	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	200	50	618	1208	0.166	197	207	618	0.3	0.4	4.839	A
2	610	153	134	1959	0.312	613	632	681	0.8	0.8	5.275	A
3	1148	287	228	998	1.150	1008	1021	519	41.4	74.3	208.543	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	172	43	603	1258	0.137	173	175	580	0.4	0.2	4.655	A
2	521	130	124	1911	0.273	521	527	652	0.8	0.7	4.999	A
3	939	235	181	1025	0.916	1001	1018	464	74.3	54.6	229.488	F

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	143	36	541	1258	0.114	141	146	505	0.2	0.3	4.666	A
2	427	107	102	1950	0.219	427	439	580	0.7	0.6	4.682	A
3	772	193	154	1067	0.723	891	941	375	54.6	15.7	114.542	F

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	44	974	0.045	44	42	0.0	0.0	4.030	A
			2	1, 3	103	974	0.106	103	101	0.0	0.1	4.289	A
		2	1	(1, 2, 3)	147			147	145	0.0	0.0	0.008	A
	Exit	1	1		462			462	456	0.0	0.0	0.000	A
2	Entry	1	1	3	202	999	0.203	201	202	0.0	0.4	4.793	A
			2	1, 2, (3)	223	999	0.223	222	225	0.0	0.4	4.662	A
		2	1	(1, 2, 3)	425			425	429	0.0	0.0	0.000	A
	Exit	1	1		518			518	512	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	580	730	0.794	577	568	0.0	3.4	17.847	C
			2	(2), 3	200	730	0.274	201	198	0.0	0.3	6.492	A
		2	1	(1, 2, 3)	782			780	781	0.0	0.2	0.109	A
	Exit	1	1		368			368	368	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	51	942	0.054	51	52	0.0	0.1	4.287	A
			2	1, 3	118	942	0.125	117	121	0.1	0.3	4.634	A
		2	1	(1, 2, 3)	169			169	174	0.0	0.0	0.026	A
	Exit	1	1		560			560	554	0.0	0.0	0.000	A
2	Entry	1	1	3	236	994	0.238	236	244	0.4	0.4	4.981	A
			2	1, 2, (3)	262	994	0.264	262	268	0.4	0.4	4.811	A
		2	1	(1, 2, 3)	499			499	513	0.0	0.0	0.000	A
	Exit	1	1		613			613	609	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	665	721	0.922	670	661	3.4	6.5	34.874	D
			2	(2), 3	261	721	0.362	262	259	0.3	0.6	7.861	A
		2	1	(1, 2, 3)	921			926	934	0.2	1.1	3.856	A
	Exit	1	1		424			424	443	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	59	919	0.064	59	65	0.1	0.1	4.516	A
			2	1, 3	147	919	0.160	147	146	0.3	0.2	4.810	A
		2	1	(1, 2, 3)	206			206	210	0.0	0.0	0.037	A
	Exit	1	1		627			627	623	0.0	0.0	0.000	A
2	Entry	1	1	3	299	984	0.304	301	305	0.4	0.4	5.190	A
			2	1, 2, (3)	328	984	0.333	329	335	0.4	0.5	5.315	A
		2	1	(1, 2, 3)	627			627	641	0.0	0.0	0.000	A
	Exit	1	1		685			685	689	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	708	708	0.999	700	699	6.5	12.8	57.837	F
			2	(2), 3	321	708	0.453	321	316	0.6	1.1	10.983	B
		2	1	(1, 2, 3)	1142			1029	1042	1.1	27.4	50.249	F
	Exit	1	1		544			544	552	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	64	922	0.069	63	63	0.1	0.1	4.515	A
			2	1, 3	136	922	0.148	134	144	0.2	0.2	4.907	A
		2	1	(1, 2, 3)	200			200	207	0.0	0.0	0.050	A
	Exit	1	1		618			618	632	0.0	0.0	0.000	A
2	Entry	1	1	3	291	988	0.294	292	300	0.4	0.4	5.351	A
			2	1, 2, (3)	319	988	0.323	321	331	0.5	0.4	5.209	A
		2	1	(1, 2, 3)	610			610	631	0.0	0.0	0.000	A
	Exit	1	1		681			681	684	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	703	710	0.990	699	709	12.8	13.8	67.856	F
			2	(2), 3	311	710	0.439	309	311	1.1	1.4	12.645	B
		2	1	(1, 2, 3)	1148			1014	1026	27.4	59.1	157.526	F
	Exit	1	1		519			519	543	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	49	927	0.053	49	51	0.1	0.1	4.527	A
			2	1, 3	123	927	0.133	124	124	0.2	0.1	4.683	A
		2	1	(1, 2, 3)	172			172	174	0.0	0.0	0.017	A
	Exit	1	1		580			580	598	0.0	0.0	0.000	A
2	Entry	1	1	3	255	991	0.257	256	253	0.4	0.3	5.014	A
			2	1, 2, (3)	266	991	0.269	265	273	0.4	0.4	4.985	A
		2	1	(1, 2, 3)	521			521	526	0.0	0.0	0.000	A
	Exit	1	1		652			652	664	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	709	723	0.980	711	714	13.8	12.6	66.257	F
			2	(2), 3	295	723	0.408	291	304	1.4	1.1	11.696	B
		2	1	(1, 2, 3)	939			1004	1012	59.1	40.8	179.421	F
	Exit	1	1		464			464	457	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	41	950	0.043	39	43	0.1	0.1	4.473	A
			2	1, 3	103	950	0.108	102	103	0.1	0.2	4.683	A
		2	1	(1, 2, 3)	143			143	146	0.0	0.0	0.044	A
	Exit	1	1		505			505	534	0.0	0.0	0.000	A
2	Entry	1	1	3	206	999	0.206	207	210	0.3	0.2	4.609	A
			2	1, 2, (3)	221	999	0.221	220	229	0.4	0.4	4.747	A
		2	1	(1, 2, 3)	427			427	438	0.0	0.0	0.000	A
	Exit	1	1		580			580	611	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	617	731	0.843	645	675	12.6	6.0	50.612	F
			2	(2), 3	244	731	0.333	246	267	1.1	0.6	10.392	B
		2	1	(1, 2, 3)	772			861	913	40.8	9.0	78.907	F
	Exit	1	1		375			375	380	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	1147	974	0.045	44	42	0.0	0.0	4.030	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	103	26	1147	973	0.106	103	101	0.0	0.1	4.289	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	-	-	-	44	43	0.0	0.0	0.015	A
				3	103	26	-	-	-	103	102	0.0	0.0	0.005	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	202	51	1033	999	0.203	201	202	0.0	0.4	4.793	A
			2	1	158	39	1033	999	0.158	158	160	0.0	0.3	4.829	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	64	16	1033	999	0.065	64	65	0.0	0.1	4.224	A
		2	1	1	158	39	-	-	-	158	161	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	267	67	-	-	-	267	268	0.0	0.0	0.000	A
3	Entry	1	1	1	305	76	777	731	0.418	304	296	0.0	1.9	18.598	C
				2	274	69	777	731	0.375	273	272	0.0	1.5	17.027	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	200	50	777	731	0.274	201	198	0.0	0.3	6.492	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	306	77	-	-	-	305	304	0.0	0.1	0.131	A
				2	476	119	-	-	-	474	477	0.0	0.1	0.095	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	51	13	1147	943	0.054	51	52	0.0	0.1	4.287	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	118	30	1147	942	0.125	117	121	0.1	0.3	4.634	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	51	13	-	-	-	51	52	0.0	0.0	0.014	A
				3	118	30	-	-	-	118	122	0.0	0.0	0.031	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	236	59	1033	994	0.237	236	244	0.4	0.4	4.981	A
			2	1	191	48	1033	994	0.192	190	190	0.3	0.3	5.079	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	72	18	1033	994	0.072	71	78	0.1	0.1	4.128	A
		2	1	2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	308	77	-	-	-	308	323	0.0	0.0	0.000	A
3	Entry	1	1	1	367	92	777	721	0.508	370	364	1.9	3.8	35.650	E
				2	298	75	777	720	0.414	300	298	1.5	2.7	33.922	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	261	65	777	720	0.362	262	259	0.3	0.6	7.861	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	365	91	-	-	-	367	371	0.1	0.5	4.066	A
				2	556	139	-	-	-	559	563	0.1	0.6	3.717	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	1147	918	0.064	59	65	0.1	0.1	4.516	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	147	37	1147	917	0.161	147	146	0.3	0.2	4.810	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	-	-	-	59	65	0.0	0.0	0.019	A
				3	147	37	-	-	-	147	146	0.0	0.0	0.046	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	299	75	1033	984	0.304	301	305	0.4	0.4	5.190	A
			2	1	233	58	1033	984	0.237	232	234	0.3	0.4	5.614	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	95	24	1033	983	0.097	96	101	0.1	0.1	4.582	A
		2	1	1	233	58	-	-	-	233	234	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	394	98	-	-	-	394	406	0.0	0.0	0.000	A
3	Entry	1	1	1	399	100	777	708	0.563	394	389	3.8	7.2	58.247	F
				2	309	77	777	708	0.436	305	309	2.7	5.7	57.323	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	321	80	777	709	0.453	321	316	0.6	1.1	10.983	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	452	113	-	-	-	399	403	0.5	11.3	51.108	F
				2	690	173	-	-	-	630	639	0.6	16.1	49.703	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	64	16	1147	922	0.069	63	63	0.1	0.1	4.515	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	136	34	1147	921	0.148	134	144	0.2	0.2	4.907	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	64	16	-	-	-	64	63	0.0	0.0	0.035	A
				3	136	34	-	-	-	136	144	0.0	0.0	0.056	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	291	73	1033	988	0.294	292	300	0.4	0.4	5.351	A
			2	1	227	57	1033	988	0.229	228	233	0.4	0.3	5.503	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	93	23	1033	987	0.094	93	98	0.1	0.1	4.476	A
		2	1	1	227	57	-	-	-	227	233	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	384	96	-	-	-	384	399	0.0	0.0	0.000	A
3	Entry	1	1	1	396	99	777	710	0.558	390	400	7.2	8.1	68.284	F
				2	307	77	777	709	0.432	310	310	5.7	5.7	67.299	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	311	78	777	709	0.439	309	311	1.1	1.4	12.645	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	452	113	-	-	-	396	403	11.3	23.3	158.740	F
				2	696	174	-	-	-	618	622	16.1	35.8	156.744	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1147	926	0.053	49	51	0.1	0.1	4.527	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	123	31	1147	930	0.132	124	124	0.2	0.1	4.683	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	-	-	-	49	51	0.0	0.0	0.011	A
				3	123	31	-	-	-	123	123	0.0	0.0	0.020	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	255	64	1033	992	0.257	256	253	0.4	0.3	5.014	A
			2	1	182	46	1033	991	0.184	181	193	0.3	0.3	5.249	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	84	21	1033	991	0.085	84	80	0.1	0.1	4.317	A
		2	1	1	182	46	-	-	-	182	193	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	339	85	-	-	-	339	333	0.0	0.0	0.000	A
3	Entry	1	1	1	401	100	777	723	0.556	398	405	8.1	7.3	66.643	F
				2	307	77	777	723	0.425	312	309	5.7	5.3	65.753	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	295	74	777	723	0.408	291	304	1.4	1.1	11.696	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	374	94	-	-	-	401	401	23.3	16.5	181.355	F
				2	565	141	-	-	-	602	610	35.8	24.3	178.138	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	1147	945	0.043	39	43	0.1	0.1	4.473	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	103	26	1147	948	0.108	102	103	0.1	0.2	4.683	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	-	-	-	41	43	0.0	0.0	0.034	A
				3	103	26	-	-	-	103	103	0.0	0.0	0.049	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	206	51	1033	999	0.206	207	210	0.3	0.2	4.609	A
			2	1	156	39	1033	999	0.156	154	161	0.3	0.3	4.949	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	65	16	1033	999	0.066	66	68	0.1	0.1	4.245	A
		2	1	1	156	39	-	-	-	156	161	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	271	68	-	-	-	271	277	0.0	0.0	0.000	A
3	Entry	1	1	1	334	84	777	731	0.457	351	373	7.3	3.3	51.669	F
				2	282	71	777	731	0.386	294	302	5.3	2.8	49.314	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	244	61	777	731	0.334	246	267	1.1	0.6	10.392	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	307	77	-	-	-	334	357	16.5	3.9	79.411	F
				2	464	116	-	-	-	526	556	24.3	5.2	78.581	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	13.62	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	13.62	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	523	100.000
2		ONE HOUR	✓	702	100.000
3		ONE HOUR	✓	846	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	169	354
	2	89	0	613
	3	262	584	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

From \ To	1	2	3
1	0	2	0
2	6	0	3
3	2	3	0

Cyclist %

From \ To	1	2	3
1	0	0	0
2	0	0	0
3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.46	6.50	1.0	A	481	721
2	0.45	6.60	1.6	A	641	962
3	0.84	23.86	6.1	C	774	1162

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	393	98	436	1356	0.290	393	388	268	0.0	0.4	4.701	A
2	524	131	264	1856	0.282	524	530	564	0.0	0.8	5.144	A
3	631	158	69	1138	0.555	634	632	718	0.0	1.5	9.665	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	470	118	522	1319	0.356	472	476	328	0.4	0.5	5.347	A
2	632	158	322	1770	0.357	633	634	671	0.8	1.0	5.585	A
3	762	190	83	1147	0.664	767	755	872	1.5	2.5	12.452	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	582	145	628	1278	0.455	583	578	388	0.5	0.9	6.104	A
2	787	197	396	1738	0.453	783	782	815	1.0	1.6	6.449	A
3	921	230	101	1121	0.821	915	922	1078	2.5	5.8	20.385	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	571	143	649	1231	0.463	572	588	387	0.9	1.0	6.505	A
2	763	191	384	1755	0.435	762	785	837	1.6	1.2	6.596	A
3	942	236	90	1118	0.843	946	945	1056	5.8	6.1	23.864	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	467	117	522	1300	0.359	466	470	325	1.0	0.8	5.466	A
2	627	157	317	1752	0.358	625	633	671	1.2	1.0	5.620	A
3	756	189	84	1168	0.648	762	778	858	6.1	2.7	14.651	B

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	402	101	441	1354	0.297	401	406	263	0.8	0.5	4.863	A
2	517	129	270	1835	0.281	513	532	572	1.0	0.9	5.168	A
3	634	159	66	1142	0.555	638	643	717	2.7	1.5	10.093	B

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	128	988	0.130	129	126	0.0	0.1	4.331	A
			2	1, 3	264	988	0.267	264	261	0.0	0.3	4.748	A
		2	1	(1, 2, 3)	393			392	389	0.0	0.0	0.085	A
	Exit	1	1		268			268	265	0.0	0.0	0.000	A
2	Entry	1	1	3	326	945	0.345	326	330	0.0	0.5	5.410	A
			2	1, 2, (3)	197	945	0.209	197	200	0.0	0.3	4.699	A
		2	1	(1, 2, 3)	524			524	533	0.0	0.0	0.000	A
	Exit	1	1		564			564	562	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	472	756	0.624	474	470	0.0	1.3	11.039	B
			2	(2), 3	159	756	0.210	160	162	0.0	0.2	5.654	A
		2	1	(1, 2, 3)	631			631	638	0.0	0.0	0.000	A
	Exit	1	1		718			718	723	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	149	957	0.156	149	154	0.1	0.2	4.494	A
			2	1, 3	321	957	0.336	322	322	0.3	0.3	5.448	A
		2	1	(1, 2, 3)	470			470	476	0.0	0.0	0.206	A
	Exit	1	1		328			328	314	0.0	0.0	0.000	A
2	Entry	1	1	3	385	925	0.416	385	389	0.5	0.7	6.033	A
			2	1, 2, (3)	247	925	0.267	247	245	0.3	0.3	4.863	A
		2	1	(1, 2, 3)	632			632	635	0.0	0.0	0.000	A
	Exit	1	1		671			671	677	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	559	752	0.743	561	548	1.3	2.1	14.610	B
			2	(2), 3	203	752	0.270	206	207	0.2	0.3	6.603	A
		2	1	(1, 2, 3)	762			762	759	0.0	0.0	0.022	A
	Exit	1	1		872			872	874	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	187	918	0.204	187	189	0.2	0.2	4.883	A
			2	1, 3	395	918	0.430	396	389	0.3	0.7	6.140	A
		2	1	(1, 2, 3)	582			582	579	0.0	0.1	0.364	A
	Exit	1	1		388			388	381	0.0	0.0	0.000	A
2	Entry	1	1	3	475	901	0.528	472	474	0.7	1.1	7.169	A
			2	1, 2, (3)	311	901	0.346	312	308	0.3	0.5	5.325	A
		2	1	(1, 2, 3)	787			787	784	0.0	0.0	0.001	A
	Exit	1	1		815			815	828	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	642	747	0.860	636	641	2.1	4.8	24.146	C
			2	(2), 3	281	747	0.376	279	281	0.3	0.7	7.856	A
		2	1	(1, 2, 3)	921			923	934	0.0	0.3	1.101	A
	Exit	1	1		1078			1078	1072	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	189	911	0.207	189	191	0.2	0.3	4.888	A
			2	1, 3	384	911	0.421	384	397	0.7	0.7	6.535	A
		2	1	(1, 2, 3)	571			572	589	0.1	0.0	0.505	A
	Exit	1	1		387			387	388	0.0	0.0	0.000	A
2	Entry	1	1	3	466	905	0.515	467	477	1.1	0.7	7.213	A
			2	1, 2, (3)	297	905	0.328	295	309	0.5	0.4	5.635	A
		2	1	(1, 2, 3)	763			763	784	0.0	0.0	0.000	A
	Exit	1	1		837			837	844	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	656	750	0.875	657	659	4.8	4.9	27.403	D
			2	(2), 3	288	750	0.384	289	286	0.7	0.7	7.651	A
		2	1	(1, 2, 3)	942			944	945	0.3	0.5	2.411	A
	Exit	1	1		1056			1056	1086	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	150	957	0.157	149	149	0.3	0.2	4.634	A
			2	1, 3	316	957	0.330	317	322	0.7	0.5	5.537	A
		2	1	(1, 2, 3)	467			466	469	0.0	0.0	0.210	A
	Exit	1	1		325			325	326	0.0	0.0	0.000	A
2	Entry	1	1	3	383	927	0.413	383	388	0.7	0.6	6.039	A
			2	1, 2, (3)	244	927	0.263	242	245	0.4	0.4	4.953	A
		2	1	(1, 2, 3)	627			627	633	0.0	0.0	0.000	A
	Exit	1	1		671			671	681	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	554	752	0.737	559	566	4.9	2.3	17.500	C
			2	(2), 3	202	752	0.269	203	211	0.7	0.4	6.622	A
		2	1	(1, 2, 3)	756			756	766	0.5	0.0	0.206	A
	Exit	1	1		858			858	874	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	131	986	0.133	131	133	0.2	0.1	4.246	A
			2	1, 3	271	986	0.275	270	273	0.5	0.3	4.968	A
		2	1	(1, 2, 3)	402			402	405	0.0	0.0	0.131	A
	Exit	1	1		263			263	265	0.0	0.0	0.000	A
2	Entry	1	1	3	324	943	0.343	322	330	0.6	0.6	5.559	A
			2	1, 2, (3)	193	943	0.205	192	202	0.4	0.3	4.524	A
		2	1	(1, 2, 3)	517			517	532	0.0	0.0	0.000	A
	Exit	1	1		572			572	579	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	471	757	0.622	473	477	2.3	1.3	11.535	B
			2	(2), 3	163	757	0.216	164	166	0.4	0.2	5.950	A
		2	1	(1, 2, 3)	634			634	639	0.0	0.0	0.001	A
	Exit	1	1		717			717	737	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	128	32	1147	987	0.130	129	126	0.0	0.1	4.331	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	264	66	1147	988	0.267	264	261	0.0	0.3	4.748	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	128	32	-	-	-	128	127	0.0	0.0	0.052	A
				3	264	66	-	-	-	264	263	0.0	0.0	0.101	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	326	82	1033	944	0.346	326	330	0.0	0.5	5.410	A
			2	1	69	17	1033	944	0.073	69	68	0.0	0.1	5.294	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	128	32	1033	945	0.136	128	132	0.0	0.2	4.397	A
		2	1	1	69	17	-	-	-	69	69	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	455	114	-	-	-	455	464	0.0	0.0	0.000	A
3	Entry	1	1	1	197	49	777	756	0.261	198	196	0.0	0.6	11.629	B
				2	275	69	777	756	0.363	276	273	0.0	0.7	10.611	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	159	40	777	756	0.210	160	162	0.0	0.2	5.654	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	197	49	-	-	-	197	199	0.0	0.0	0.000	A
				2	434	108	-	-	-	434	439	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	1147	957	0.156	149	154	0.1	0.2	4.494	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	321	80	1147	958	0.335	322	322	0.3	0.3	5.448	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	-	-	-	149	154	0.0	0.0	0.141	A
				3	321	80	-	-	-	321	322	0.0	0.0	0.237	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	385	96	1033	926	0.416	385	389	0.5	0.7	6.033	A
			2	1	83	21	1033	927	0.089	83	82	0.1	0.1	5.536	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	165	41	1033	926	0.178	164	163	0.2	0.3	4.537	A
		2	1	1	83	21	-	-	-	83	82	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	550	137	-	-	-	550	553	0.0	0.0	0.000	A
3	Entry	1	1	1	240	60	777	752	0.319	245	232	0.6	0.8	15.459	C
				2	318	80	777	752	0.423	316	316	0.7	1.4	13.982	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	203	51	777	752	0.270	206	207	0.2	0.3	6.603	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	240	60	-	-	-	240	233	0.0	0.0	0.038	A
				2	522	130	-	-	-	522	526	0.0	0.0	0.015	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	187	47	1147	917	0.204	187	189	0.2	0.2	4.883	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	395	99	1147	917	0.431	396	389	0.3	0.7	6.140	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	187	47	-	-	-	187	189	0.0	0.0	0.260	A
				3	395	99	-	-	-	395	391	0.0	0.1	0.414	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	475	119	1033	901	0.528	472	474	0.7	1.1	7.169	A
			2	1	101	25	1033	900	0.112	101	99	0.1	0.2	6.008	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	210	53	1033	901	0.234	210	209	0.3	0.3	5.011	A
		2	1	1	101	25	-	-	-	101	100	0.0	0.0	0.001	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	686	171	-	-	-	686	685	0.0	0.0	0.001	A
3	Entry	1	1	1	290	72	777	747	0.388	287	282	0.8	2.2	25.091	D
				2	352	88	777	747	0.472	349	359	1.4	2.6	23.392	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	281	70	777	747	0.376	279	281	0.3	0.7	7.856	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	289	72	-	-	-	290	288	0.0	0.1	1.177	A
				2	632	158	-	-	-	633	646	0.0	0.2	1.066	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	189	47	1147	911	0.207	189	191	0.2	0.3	4.888	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	384	96	1147	910	0.422	384	397	0.7	0.7	6.535	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	188	47	-	-	-	189	192	0.0	0.0	0.367	A
				3	382	96	-	-	-	384	397	0.1	0.0	0.571	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	466	116	1033	905	0.515	467	477	1.1	0.7	7.213	A
			2	1	90	23	1033	904	0.100	90	96	0.2	0.1	6.393	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	206	52	1033	904	0.228	205	213	0.3	0.3	5.305	A
		2	1	1	90	23	-	-	-	90	95	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	672	168	-	-	-	672	688	0.0	0.0	0.000	A
3	Entry	1	1	1	293	73	777	750	0.391	297	292	2.2	2.2	28.420	D
				2	363	91	777	750	0.484	360	367	2.6	2.7	26.585	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	288	72	777	750	0.384	289	286	0.7	0.7	7.651	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	293	73	-	-	-	293	292	0.1	0.1	2.688	A
				2	649	162	-	-	-	651	653	0.2	0.3	2.285	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	150	38	1147	956	0.157	149	149	0.3	0.2	4.634	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	316	79	1147	956	0.331	317	322	0.7	0.5	5.537	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	150	38	-	-	-	150	149	0.0	0.0	0.106	A
				3	316	79	-	-	-	316	321	0.0	0.0	0.257	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	383	96	1033	927	0.413	383	388	0.7	0.6	6.039	A
			2	1	84	21	1033	928	0.091	84	81	0.1	0.1	5.614	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	159	40	1033	927	0.172	158	165	0.3	0.2	4.636	A
		2	1	1	84	21	-	-	-	84	81	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	542	136	-	-	-	542	552	0.0	0.0	0.000	A
3	Entry	1	1	1	234	59	777	752	0.312	240	245	2.2	0.9	18.557	C
				2	320	80	777	752	0.425	318	321	2.7	1.5	16.690	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	202	51	777	752	0.269	203	211	0.7	0.4	6.622	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	234	59	-	-	-	234	240	0.1	0.0	0.255	A
				2	522	130	-	-	-	522	526	0.3	0.0	0.183	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	131	33	1147	987	0.133	131	133	0.2	0.1	4.246	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	271	68	1147	988	0.274	270	273	0.5	0.3	4.968	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	131	33	-	-	-	131	132	0.0	0.0	0.086	A
				3	271	68	-	-	-	271	273	0.0	0.0	0.153	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	324	81	1033	944	0.343	322	330	0.6	0.6	5.559	A
			2	1	67	17	1033	943	0.071	66	68	0.1	0.1	5.027	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	126	32	1033	942	0.134	125	134	0.2	0.2	4.276	A
		2	1	1	67	17	-	-	-	67	68	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	450	112	-	-	-	450	464	0.0	0.0	0.000	A
3	Entry	1	1	1	194	49	777	757	0.256	196	197	0.9	0.6	12.387	B
				2	277	69	777	757	0.366	277	280	1.5	0.7	10.928	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	163	41	777	757	0.215	164	166	0.4	0.2	5.950	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	194	49	-	-	-	194	196	0.0	0.0	0.003	A
				2	440	110	-	-	-	440	443	0.0	0.0	0.001	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | 2a WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	34.74	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	34.74	D

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2028	2a WD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	145	100.000
2		ONE HOUR	✓	549	100.000
3		ONE HOUR	✓	917	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	66	79
	2	259	0	290
	3	262	655	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	9	5
	2	2	0	14
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.12	4.82	0.2	A	133	199
2	0.33	5.44	1.0	A	508	762
3	0.95	57.19	16.7	F	840	1260

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	104	26	492	1453	0.072	104	108	396	0.0	0.2	4.236	A
2	412	103	57	1940	0.213	412	412	539	0.0	0.5	4.690	A
3	684	171	202	1097	0.623	686	687	267	0.0	2.0	11.268	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	133	33	582	1393	0.095	133	138	469	0.2	0.1	4.567	A
2	508	127	72	1948	0.261	507	504	644	0.5	0.7	4.888	A
3	811	203	239	1134	0.715	812	816	339	2.0	3.7	15.809	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	160	40	710	1318	0.122	160	165	574	0.1	0.2	4.586	A
2	610	153	92	1887	0.323	611	608	778	0.7	0.9	5.436	A
3	1021	255	290	1101	0.927	994	977	413	3.7	13.4	35.720	E

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	163	41	707	1336	0.122	164	166	568	0.2	0.1	4.821	A
2	605	151	86	1858	0.326	604	611	786	0.9	1.0	5.302	A
3	1007	252	278	1064	0.946	997	1003	412	13.4	16.7	57.186	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	127	32	600	1414	0.090	126	135	481	0.1	0.1	4.507	A
2	488	122	67	1890	0.258	490	501	659	1.0	0.5	4.984	A
3	825	206	237	1088	0.759	844	876	320	16.7	4.5	32.379	D

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	27	497	1392	0.079	109	117	388	0.1	0.1	4.333	A
2	422	106	58	1904	0.222	423	422	548	0.5	0.4	4.720	A
3	691	173	196	1094	0.631	690	702	285	4.5	2.4	12.800	B

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	47	968	0.048	46	50	0.0	0.1	4.305	A
			2	1, 3	58	968	0.059	57	58	0.0	0.1	4.170	A
		2	1	(1, 2, 3)	104			104	108	0.0	0.0	0.004	A
	Exit	1	1		396			396	393	0.0	0.0	0.000	A
2	Entry	1	1	3	161	1014	0.159	160	164	0.0	0.2	4.510	A
			2	1, 2, (3)	252	1014	0.248	252	247	0.0	0.3	4.800	A
		2	1	(1, 2, 3)	412			412	414	0.0	0.0	0.000	A
	Exit	1	1		539			539	543	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	487	717	0.679	488	494	0.0	1.7	13.142	B
			2	(2), 3	197	717	0.275	198	193	0.0	0.3	6.412	A
		2	1	(1, 2, 3)	684			684	695	0.0	0.0	0.005	A
	Exit	1	1		267			267	271	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	61	935	0.065	62	63	0.1	0.1	4.617	A
			2	1, 3	71	935	0.076	72	75	0.1	0.1	4.506	A
		2	1	(1, 2, 3)	133			133	138	0.0	0.0	0.011	A
	Exit	1	1		469			469	473	0.0	0.0	0.000	A
2	Entry	1	1	3	207	1009	0.205	205	204	0.2	0.4	4.781	A
			2	1, 2, (3)	301	1009	0.298	301	300	0.3	0.3	4.956	A
		2	1	(1, 2, 3)	508			508	505	0.0	0.0	0.000	A
	Exit	1	1		644			644	647	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	567	707	0.803	567	572	1.7	3.2	19.256	C
			2	(2), 3	244	707	0.346	246	244	0.3	0.4	7.099	A
		2	1	(1, 2, 3)	811			811	823	0.0	0.0	0.157	A
	Exit	1	1		339			339	339	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	69	888	0.078	68	73	0.1	0.1	4.576	A
			2	1, 3	91	888	0.103	92	92	0.1	0.1	4.575	A
		2	1	(1, 2, 3)	160			160	165	0.0	0.0	0.010	A
	Exit	1	1		574			574	570	0.0	0.0	0.000	A
2	Entry	1	1	3	248	1002	0.247	247	247	0.4	0.4	5.229	A
			2	1, 2, (3)	363	1002	0.362	364	361	0.3	0.5	5.566	A
		2	1	(1, 2, 3)	610			610	609	0.0	0.0	0.000	A
	Exit	1	1		778			778	768	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	663	692	0.958	652	650	3.2	8.8	38.964	E
			2	(2), 3	340	692	0.491	342	328	0.4	1.1	10.448	B
		2	1	(1, 2, 3)	1021			1003	1002	0.0	3.6	5.832	A
	Exit	1	1		413			413	412	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	77	889	0.087	78	78	0.1	0.0	4.823	A
			2	1, 3	86	889	0.097	86	89	0.1	0.1	4.808	A
		2	1	(1, 2, 3)	163			163	166	0.0	0.0	0.006	A
	Exit	1	1		568			568	572	0.0	0.0	0.000	A
2	Entry	1	1	3	255	1004	0.254	254	253	0.4	0.4	5.065	A
			2	1, 2, (3)	351	1004	0.350	350	358	0.5	0.6	5.457	A
		2	1	(1, 2, 3)	605			605	612	0.0	0.0	0.000	A
	Exit	1	1		786			786	795	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	661	695	0.951	661	657	8.8	8.8	50.039	F
			2	(2), 3	338	695	0.486	336	345	1.1	1.1	12.042	B
		2	1	(1, 2, 3)	1007			998	1003	3.6	6.8	20.000	C
	Exit	1	1		412			412	414	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	59	928	0.064	59	62	0.0	0.1	4.245	A
			2	1, 3	67	928	0.073	67	73	0.1	0.1	4.694	A
		2	1	(1, 2, 3)	127			127	135	0.0	0.0	0.017	A
	Exit	1	1		481			481	495	0.0	0.0	0.000	A
2	Entry	1	1	3	192	1010	0.190	194	201	0.4	0.2	4.845	A
			2	1, 2, (3)	296	1010	0.293	296	300	0.6	0.3	5.069	A
		2	1	(1, 2, 3)	488			488	499	0.0	0.0	0.000	A
	Exit	1	1		659			659	682	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	586	707	0.829	589	609	8.8	3.7	30.557	D
			2	(2), 3	253	707	0.358	255	268	1.1	0.6	9.458	A
		2	1	(1, 2, 3)	825			840	854	6.8	0.3	9.340	A
	Exit	1	1		320			320	335	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	52	966	0.053	51	54	0.1	0.1	4.447	A
			2	1, 3	58	966	0.060	58	63	0.1	0.0	4.229	A
		2	1	(1, 2, 3)	110			110	117	0.0	0.0	0.006	A
	Exit	1	1		388			388	395	0.0	0.0	0.000	A
2	Entry	1	1	3	173	1013	0.171	174	172	0.2	0.2	4.817	A
			2	1, 2, (3)	249	1013	0.246	249	250	0.3	0.2	4.660	A
		2	1	(1, 2, 3)	422			422	422	0.0	0.0	0.000	A
	Exit	1	1		548			548	559	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	496	719	0.689	494	504	3.7	2.1	15.172	C
			2	(2), 3	195	719	0.271	196	198	0.6	0.3	6.656	A
		2	1	(1, 2, 3)	691			691	695	0.3	0.0	0.105	A
	Exit	1	1		285			285	287	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	1147	968	0.048	46	50	0.0	0.1	4.305	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	58	14	1147	967	0.060	57	58	0.0	0.1	4.170	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	-	-	-	47	50	0.0	0.0	0.000	A
				3	58	14	-	-	-	58	58	0.0	0.0	0.008	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	161	40	1033	1014	0.159	160	164	0.0	0.2	4.510	A
			2	1	202	50	1033	1014	0.199	202	199	0.0	0.3	4.880	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	50	13	1033	1014	0.050	50	49	0.0	0.1	4.430	A
		2	1	1	202	50	-	-	-	202	200	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	211	53	-	-	-	211	214	0.0	0.0	0.000	A
3	Entry	1	1	1	193	48	777	717	0.270	194	194	0.0	0.7	14.193	B
				2	294	73	777	717	0.409	294	300	0.0	1.0	12.459	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	197	49	777	717	0.275	198	193	0.0	0.3	6.412	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	193	48	-	-	-	193	197	0.0	0.0	0.003	A
				2	491	123	-	-	-	491	498	0.0	0.0	0.006	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	61	15	1147	935	0.065	62	63	0.1	0.1	4.617	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	71	18	1147	938	0.076	72	75	0.1	0.1	4.506	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	61	15	-	-	-	61	63	0.0	0.0	0.018	A
				3	71	18	-	-	-	71	75	0.0	0.0	0.006	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	207	52	1033	1009	0.205	205	204	0.2	0.4	4.781	A
			2	1	238	60	1033	1008	0.236	239	240	0.3	0.3	5.103	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	63	16	1033	1009	0.062	62	59	0.1	0.0	4.289	A
		2	1	1	238	60	-	-	-	238	240	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	269	67	-	-	-	269	264	0.0	0.0	0.000	A
3	Entry	1	1	1	232	58	777	707	0.329	230	232	0.7	1.5	20.340	C
				2	335	84	777	707	0.474	337	340	1.0	1.7	18.512	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	244	61	777	707	0.346	246	244	0.3	0.4	7.099	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	232	58	-	-	-	232	235	0.0	0.0	0.208	A
				2	579	145	-	-	-	579	587	0.0	0.0	0.136	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	1147	890	0.078	68	73	0.1	0.1	4.576	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	91	23	1147	888	0.103	92	92	0.1	0.1	4.575	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	-	-	-	69	73	0.0	0.0	0.007	A
				3	91	23	-	-	-	91	92	0.0	0.0	0.013	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	248	62	1033	1002	0.247	247	247	0.4	0.4	5.229	A
			2	1	288	72	1033	1002	0.288	290	288	0.3	0.4	5.772	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	75	19	1033	1002	0.074	75	72	0.0	0.1	4.647	A
		2	1	1	288	72	-	-	-	288	289	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	322	81	-	-	-	322	320	0.0	0.0	0.000	A
3	Entry	1	1	1	291	73	777	691	0.420	285	282	1.5	4.0	40.305	E
				2	372	93	777	692	0.538	368	368	1.7	4.7	37.933	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	340	85	777	692	0.491	342	328	0.4	1.1	10.448	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	295	74	-	-	-	291	292	0.0	1.0	6.085	A
				2	726	181	-	-	-	712	711	0.0	2.6	5.728	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	77	19	1147	891	0.087	78	78	0.1	0.0	4.823	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	86	21	1147	887	0.097	86	89	0.1	0.1	4.808	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	77	19	-	-	-	77	78	0.0	0.0	0.005	A
				3	86	21	-	-	-	86	89	0.0	0.0	0.007	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	255	64	1033	1004	0.254	254	253	0.4	0.4	5.065	A
			2	1	279	70	1033	1004	0.278	278	286	0.4	0.5	5.650	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	72	18	1033	1004	0.071	71	72	0.1	0.1	4.591	A
		2	1	1	279	70	-	-	-	279	286	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	327	82	-	-	-	327	325	0.0	0.0	0.000	A
3	Entry	1	1	1	287	72	777	695	0.413	290	286	4.0	3.8	51.057	F
				2	374	93	777	695	0.538	371	372	4.7	5.0	49.262	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	338	84	777	695	0.485	336	345	1.1	1.1	12.042	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	291	73	-	-	-	287	285	1.0	2.0	20.854	C
				2	717	179	-	-	-	711	718	2.6	4.9	19.661	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	1147	932	0.064	59	62	0.0	0.1	4.245	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	67	17	1147	930	0.072	67	73	0.1	0.1	4.694	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	-	-	-	59	62	0.0	0.0	0.017	A
				3	67	17	-	-	-	67	73	0.0	0.0	0.017	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	192	48	1033	1010	0.190	194	201	0.4	0.2	4.845	A
			2	1	237	59	1033	1010	0.235	237	239	0.5	0.2	5.231	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	59	15	1033	1010	0.059	59	61	0.1	0.1	4.357	A
		2	1	1	237	59	-	-	-	237	238	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	251	63	-	-	-	251	261	0.0	0.0	0.000	A
3	Entry	1	1	1	243	61	777	707	0.344	244	256	3.8	1.6	31.756	D
				2	344	86	777	707	0.486	345	353	5.0	2.1	29.688	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	253	63	777	707	0.358	255	268	1.1	0.6	9.458	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	237	59	-	-	-	243	247	2.0	0.0	9.551	A
				2	588	147	-	-	-	597	606	4.9	0.3	9.255	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	1147	965	0.053	51	54	0.1	0.1	4.447	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	58	15	1147	967	0.060	58	63	0.1	0.0	4.229	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	-	-	-	52	54	0.0	0.0	0.001	A
				3	58	15	-	-	-	58	63	0.0	0.0	0.010	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	173	43	1033	1013	0.171	174	172	0.2	0.2	4.817	A
			2	1	196	49	1033	1013	0.193	196	198	0.2	0.2	4.763	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	53	13	1033	1014	0.053	53	52	0.1	0.0	4.221	A
		2	1	1	196	49	-	-	-	196	198	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	227	57	-	-	-	227	224	0.0	0.0	0.000	A
3	Entry	1	1	1	195	49	777	719	0.271	192	197	1.6	1.0	15.899	C
				2	301	75	777	719	0.418	302	307	2.1	1.1	14.706	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	195	49	777	719	0.271	196	198	0.6	0.3	6.656	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	195	49	-	-	-	195	195	0.0	0.0	0.101	A
				2	496	124	-	-	-	496	500	0.3	0.0	0.106	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | 2a WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	6.80	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.80	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2028	2a WD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	465	100.000
2		ONE HOUR	✓	638	100.000
3		ONE HOUR	✓	483	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	176	289
	2	121	0	517
	3	178	305	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

From \ To	1	2	3
1	0	3	0
2	10	0	4
3	4	3	0

Cyclist %

From \ To	1	2	3
1	0	0	0
2	0	0	0
3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.35	5.05	1.2	A	426	638
2	0.39	6.02	1.4	A	580	870
3	0.52	9.46	1.1	A	450	676

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	337	84	231	1573	0.214	340	343	219	0.0	0.3	4.404	A
2	492	123	208	1852	0.265	493	489	363	0.0	0.7	4.937	A
3	358	89	92	1075	0.333	358	354	609	0.0	0.8	6.479	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	430	107	275	1588	0.271	427	426	259	0.3	0.5	4.436	A
2	553	138	274	1848	0.299	550	582	427	0.7	1.1	5.290	A
3	430	107	104	1122	0.383	430	437	720	0.8	1.0	7.629	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	495	124	357	1478	0.335	492	518	320	0.5	1.0	5.051	A
2	705	176	309	1800	0.392	703	706	539	1.1	1.1	5.636	A
3	547	137	126	1057	0.518	551	546	887	1.0	1.1	9.460	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	515	129	346	1466	0.351	508	529	354	1.0	1.2	4.994	A
2	691	173	320	1786	0.387	691	714	535	1.1	1.4	6.021	A
3	557	139	141	1088	0.512	559	541	869	1.1	1.0	9.039	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	425	106	278	1558	0.273	423	434	279	1.2	0.7	4.749	A
2	569	142	257	1869	0.305	569	577	444	1.4	0.8	5.247	A
3	439	110	118	1062	0.414	439	442	709	1.0	1.0	7.713	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	352	88	227	1556	0.226	350	371	231	0.7	0.5	4.364	A
2	472	118	216	1865	0.253	473	490	360	0.8	0.5	4.942	A
3	371	93	86	1086	0.342	373	378	603	1.0	0.7	7.038	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	128	1063	0.121	132	135	0.0	0.1	4.517	A
			2	1, 3	210	1063	0.197	208	209	0.0	0.2	4.250	A
		2	1	(1, 2, 3)	337			338	344	0.0	0.0	0.051	A
	Exit	1	1		219			219	222	0.0	0.0	0.000	A
2	Entry	1	1	3	287	963	0.298	288	286	0.0	0.5	5.082	A
			2	1, 2, (3)	205	963	0.213	205	203	0.0	0.2	4.731	A
		2	1	(1, 2, 3)	492			492	492	0.0	0.0	0.000	A
	Exit	1	1		363			363	360	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	284	750	0.378	283	279	0.0	0.8	6.938	A
			2	(2), 3	74	750	0.099	75	75	0.0	0.1	4.756	A
		2	1	(1, 2, 3)	358			358	357	0.0	0.0	0.000	A
	Exit	1	1		609			609	604	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	153	1047	0.146	152	159	0.1	0.2	4.024	A
			2	1, 3	276	1047	0.264	274	267	0.2	0.3	4.554	A
		2	1	(1, 2, 3)	430			430	427	0.0	0.0	0.076	A
	Exit	1	1		259			259	274	0.0	0.0	0.000	A
2	Entry	1	1	3	324	941	0.344	322	343	0.5	0.7	5.444	A
			2	1, 2, (3)	230	941	0.244	228	239	0.2	0.4	5.065	A
		2	1	(1, 2, 3)	553			553	583	0.0	0.0	0.000	A
	Exit	1	1		427			427	431	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	336	746	0.451	336	345	0.8	0.8	8.298	A
			2	(2), 3	94	746	0.126	93	91	0.1	0.1	5.123	A
		2	1	(1, 2, 3)	430			430	437	0.0	0.0	0.000	A
	Exit	1	1		720			720	740	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	181	1017	0.178	182	188	0.2	0.3	4.332	A
			2	1, 3	313	1017	0.307	309	330	0.3	0.6	5.152	A
		2	1	(1, 2, 3)	495			494	520	0.0	0.1	0.190	A
	Exit	1	1		320			320	328	0.0	0.0	0.000	A
2	Entry	1	1	3	408	930	0.438	407	406	0.7	0.6	5.954	A
			2	1, 2, (3)	297	930	0.320	296	300	0.4	0.4	5.192	A
		2	1	(1, 2, 3)	705			705	706	0.0	0.0	0.000	A
	Exit	1	1		539			539	539	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	415	740	0.561	422	420	0.8	0.7	10.502	B
			2	(2), 3	132	740	0.179	129	126	0.1	0.5	6.023	A
		2	1	(1, 2, 3)	547			547	547	0.0	0.0	0.000	A
	Exit	1	1		887			887	902	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	189	1021	0.186	188	196	0.3	0.4	4.360	A
			2	1, 3	325	1021	0.318	320	333	0.6	0.7	5.050	A
		2	1	(1, 2, 3)	515			515	530	0.1	0.1	0.194	A
	Exit	1	1		354			354	332	0.0	0.0	0.000	A
2	Entry	1	1	3	396	926	0.427	395	418	0.6	0.9	6.318	A
			2	1, 2, (3)	296	926	0.319	296	296	0.4	0.5	5.586	A
		2	1	(1, 2, 3)	691			691	716	0.0	0.0	0.000	A
	Exit	1	1		535			535	541	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	431	735	0.586	430	417	0.7	0.9	10.053	B
			2	(2), 3	127	735	0.173	128	124	0.5	0.1	5.576	A
		2	1	(1, 2, 3)	557			557	541	0.0	0.0	0.000	A
	Exit	1	1		869			869	912	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	167	1046	0.160	166	163	0.4	0.2	4.253	A
			2	1, 3	258	1046	0.247	257	271	0.7	0.5	4.721	A
		2	1	(1, 2, 3)	425			425	432	0.1	0.0	0.203	A
	Exit	1	1		279			279	280	0.0	0.0	0.000	A
2	Entry	1	1	3	328	947	0.346	329	335	0.9	0.5	5.435	A
			2	1, 2, (3)	241	947	0.254	241	242	0.5	0.4	4.980	A
		2	1	(1, 2, 3)	569			569	576	0.0	0.0	0.000	A
	Exit	1	1		444			444	440	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	345	742	0.464	345	346	0.9	0.8	8.446	A
			2	(2), 3	95	742	0.128	94	96	0.1	0.2	5.125	A
		2	1	(1, 2, 3)	439			439	442	0.0	0.0	0.000	A
	Exit	1	1		709			709	733	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	137	1064	0.129	134	139	0.2	0.4	4.098	A
			2	1, 3	215	1064	0.202	216	232	0.5	0.2	4.421	A
		2	1	(1, 2, 3)	352			352	370	0.0	0.0	0.062	A
	Exit	1	1		231			231	235	0.0	0.0	0.000	A
2	Entry	1	1	3	284	961	0.296	284	289	0.5	0.4	5.152	A
			2	1, 2, (3)	188	961	0.195	189	201	0.4	0.2	4.630	A
		2	1	(1, 2, 3)	472			472	489	0.0	0.0	0.000	A
	Exit	1	1		360			360	376	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	296	751	0.394	297	295	0.8	0.6	7.492	A
			2	(2), 3	75	751	0.100	76	83	0.2	0.1	5.420	A
		2	1	(1, 2, 3)	371			371	376	0.0	0.0	0.000	A
	Exit	1	1		603			603	628	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	128	32	1147	1066	0.120	132	135	0.0	0.1	4.517	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	210	52	1147	1063	0.197	208	209	0.0	0.2	4.250	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	128	32	-	-	-	128	135	0.0	0.0	0.075	A
				3	209	52	-	-	-	210	209	0.0	0.0	0.036	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	287	72	1033	964	0.298	288	286	0.0	0.5	5.082	A
			2	1	92	23	1033	965	0.096	92	94	0.0	0.1	5.286	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	112	28	1033	964	0.117	112	110	0.0	0.2	4.281	A
		2	1	1	92	23	-	-	-	92	94	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	399	100	-	-	-	399	398	0.0	0.0	0.000	A
3	Entry	1	1	1	127	32	777	749	0.170	127	129	0.0	0.4	7.264	A
				2	156	39	777	750	0.209	156	150	0.0	0.4	6.660	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	74	19	777	751	0.099	75	75	0.0	0.1	4.756	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	127	32	-	-	-	127	130	0.0	0.0	0.000	A
				2	231	58	-	-	-	231	227	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	1147	1047	0.146	152	159	0.1	0.2	4.024	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	276	69	1147	1047	0.264	274	267	0.2	0.3	4.554	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	-	-	-	153	159	0.0	0.0	0.035	A
				3	276	69	-	-	-	276	268	0.0	0.0	0.100	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	324	81	1033	941	0.344	322	343	0.5	0.7	5.444	A
			2	1	107	27	1033	941	0.113	104	109	0.1	0.3	5.609	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	123	31	1033	939	0.131	124	130	0.2	0.1	4.625	A
		2	1	1	107	27	-	-	-	107	110	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	446	112	-	-	-	446	473	0.0	0.0	0.000	A
3	Entry	1	1	1	155	39	777	746	0.208	154	164	0.4	0.5	8.959	A
				2	181	45	777	745	0.243	182	181	0.4	0.4	7.700	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	94	23	777	746	0.126	93	91	0.1	0.1	5.123	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	155	39	-	-	-	155	165	0.0	0.0	0.000	A
				2	275	69	-	-	-	275	272	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	181	45	1147	1017	0.178	182	188	0.2	0.3	4.332	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	313	78	1147	1017	0.308	309	330	0.3	0.6	5.152	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	181	45	-	-	-	181	189	0.0	0.0	0.103	A
				3	313	78	-	-	-	313	331	0.0	0.1	0.237	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	408	102	1033	929	0.439	407	406	0.7	0.6	5.954	A
			2	1	127	32	1033	928	0.137	126	133	0.3	0.2	5.877	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	170	42	1033	928	0.183	169	166	0.1	0.2	4.682	A
		2	1	1	127	32	-	-	-	127	133	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	577	144	-	-	-	577	573	0.0	0.0	0.000	A
3	Entry	1	1	1	191	48	777	739	0.259	193	195	0.5	0.5	10.947	B
				2	223	56	777	740	0.302	228	225	0.4	0.2	10.122	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	132	33	777	740	0.179	129	126	0.1	0.5	6.023	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	191	48	-	-	-	191	195	0.0	0.0	0.000	A
				2	356	89	-	-	-	356	352	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	189	47	1147	1024	0.185	188	196	0.3	0.4	4.360	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	325	81	1147	1021	0.318	320	333	0.6	0.7	5.050	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	189	47	-	-	-	189	197	0.0	0.0	0.122	A
				3	325	81	-	-	-	325	333	0.1	0.1	0.235	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	396	99	1033	927	0.427	395	418	0.6	0.9	6.318	A
			2	1	141	35	1033	924	0.153	141	135	0.2	0.3	6.219	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	154	39	1033	930	0.166	154	161	0.2	0.2	5.081	A
		2	1	1	141	35	-	-	-	141	136	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	550	137	-	-	-	550	580	0.0	0.0	0.000	A
3	Entry	1	1	1	213	53	777	735	0.290	212	196	0.5	0.5	10.508	B
				2	217	54	777	735	0.295	219	221	0.2	0.4	9.652	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	777	735	0.173	128	124	0.5	0.1	5.576	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	213	53	-	-	-	213	197	0.0	0.0	0.000	A
				2	344	86	-	-	-	344	344	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	167	42	1147	1046	0.160	166	163	0.4	0.2	4.253	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	258	65	1147	1047	0.247	257	271	0.7	0.5	4.721	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	167	42	-	-	-	167	163	0.0	0.0	0.211	A
				3	258	64	-	-	-	258	270	0.1	0.0	0.198	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	328	82	1033	946	0.347	329	335	0.9	0.5	5.435	A
			2	1	118	29	1033	948	0.124	118	115	0.3	0.2	5.491	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	123	31	1033	946	0.130	123	128	0.2	0.2	4.555	A
		2	1	1	118	29	-	-	-	118	114	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	452	113	-	-	-	452	462	0.0	0.0	0.000	A
3	Entry	1	1	1	163	41	777	742	0.219	162	165	0.5	0.5	9.131	A
				2	181	45	777	743	0.244	184	181	0.4	0.3	7.824	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	95	24	777	742	0.128	94	96	0.1	0.2	5.125	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	163	41	-	-	-	163	165	0.0	0.0	0.000	A
				2	277	69	-	-	-	277	277	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	137	34	1147	1063	0.129	134	139	0.2	0.4	4.098	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	215	54	1147	1065	0.202	216	232	0.5	0.2	4.421	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	137	34	-	-	-	137	140	0.0	0.0	0.032	A
				3	215	54	-	-	-	215	231	0.0	0.0	0.080	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	284	71	1033	961	0.296	284	289	0.5	0.4	5.152	A
			2	1	85	21	1033	961	0.088	86	94	0.2	0.1	5.115	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	103	26	1033	961	0.107	104	107	0.2	0.1	4.233	A
		2	1	1	85	21	-	-	-	85	94	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	387	97	-	-	-	387	395	0.0	0.0	0.000	A
3	Entry	1	1	1	144	36	777	750	0.192	145	141	0.5	0.3	7.899	A
				2	152	38	777	752	0.203	152	154	0.3	0.3	7.121	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	75	19	777	750	0.100	76	83	0.2	0.1	5.420	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	144	36	-	-	-	144	140	0.0	0.0	0.000	A
				2	228	57	-	-	-	228	236	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | 2a WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	Arm 3	Arm 3: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	118.62	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	118.62	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2038	2a WD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	169	100.000
2		ONE HOUR	✓	560	100.000
3		ONE HOUR	✓	1038	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	52	117
	2	209	0	351
	3	408	630	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	5	6
	2	4	0	8
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.15	4.79	0.3	A	156	234
2	0.33	5.18	0.9	A	517	776
3	1.12	196.36	69.9	F	954	1432

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	131	33	476	1357	0.097	131	128	469	0.0	0.2	4.260	A
2	434	109	91	1964	0.221	435	428	516	0.0	0.5	4.541	A
3	784	196	161	1098	0.714	784	766	365	0.0	3.7	15.675	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	152	38	561	1330	0.114	153	158	556	0.2	0.1	4.433	A
2	504	126	105	1979	0.255	506	515	608	0.5	0.6	4.811	A
3	938	235	193	1027	0.914	924	922	418	3.7	9.7	31.863	D

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	189	47	594	1275	0.148	188	192	626	0.1	0.3	4.680	A
2	612	153	132	1944	0.315	613	624	650	0.6	0.9	5.178	A
3	1156	289	230	1001	1.125	991	1001	515	9.7	45.7	102.481	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	183	46	617	1228	0.149	183	194	631	0.3	0.2	4.785	A
2	621	155	124	1868	0.333	622	620	676	0.9	0.8	5.115	A
3	1147	287	233	1045	1.097	1016	1021	514	45.7	69.9	195.656	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	152	38	614	1174	0.129	152	157	606	0.2	0.2	4.773	A
2	513	128	103	1975	0.260	515	513	664	0.8	0.6	4.849	A
3	923	231	197	1010	0.914	1023	1020	420	69.9	59.2	196.806	F

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	127	32	535	1301	0.098	128	133	510	0.2	0.2	4.553	A
2	417	104	89	1970	0.212	416	427	573	0.6	0.6	4.648	A
3	778	194	150	1043	0.746	895	953	356	59.2	17.8	120.205	F

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	39	974	0.040	40	40	0.0	0.0	4.052	A
			2	1, 3	92	974	0.094	91	89	0.0	0.1	4.345	A
		2	1	(1, 2, 3)	131			131	129	0.0	0.0	0.006	A
	Exit	1	1		469			469	457	0.0	0.0	0.000	A
2	Entry	1	1	3	210	1002	0.209	210	203	0.0	0.3	4.595	A
			2	1, 2, (3)	224	1002	0.224	225	224	0.0	0.2	4.494	A
		2	1	(1, 2, 3)	434			434	430	0.0	0.0	0.000	A
	Exit	1	1		516			516	508	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	585	729	0.802	583	572	0.0	3.3	18.430	C
			2	(2), 3	200	729	0.274	201	194	0.0	0.3	6.542	A
		2	1	(1, 2, 3)	784			785	781	0.0	0.1	0.206	A
	Exit	1	1		365			365	357	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	47	943	0.050	48	49	0.0	0.0	4.159	A
			2	1, 3	105	943	0.111	105	109	0.1	0.1	4.504	A
		2	1	(1, 2, 3)	152			152	158	0.0	0.0	0.037	A
	Exit	1	1		556			556	551	0.0	0.0	0.000	A
2	Entry	1	1	3	237	998	0.238	238	246	0.3	0.3	4.768	A
			2	1, 2, (3)	267	998	0.268	268	269	0.2	0.3	4.848	A
		2	1	(1, 2, 3)	504			504	515	0.0	0.0	0.001	A
	Exit	1	1		608			608	609	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	674	720	0.936	671	664	3.3	7.1	34.541	D
			2	(2), 3	254	720	0.352	253	258	0.3	0.6	8.347	A
		2	1	(1, 2, 3)	938			928	939	0.1	2.0	4.360	A
	Exit	1	1		418			418	435	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	56	930	0.061	56	56	0.0	0.1	4.427	A
			2	1, 3	133	930	0.143	132	136	0.1	0.2	4.736	A
		2	1	(1, 2, 3)	189			189	193	0.0	0.0	0.035	A
	Exit	1	1		626			626	629	0.0	0.0	0.000	A
2	Entry	1	1	3	289	989	0.293	289	294	0.3	0.4	5.179	A
			2	1, 2, (3)	323	989	0.327	323	330	0.3	0.5	5.177	A
		2	1	(1, 2, 3)	612			612	625	0.0	0.0	0.000	A
	Exit	1	1		650			650	662	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	698	709	0.985	689	695	7.1	13.5	59.926	F
			2	(2), 3	304	709	0.429	301	306	0.6	1.0	10.947	B
		2	1	(1, 2, 3)	1156			1002	1028	2.0	31.2	56.371	F
	Exit	1	1		515			515	526	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	59	922	0.064	59	61	0.1	0.1	4.557	A
			2	1, 3	124	922	0.134	124	133	0.2	0.1	4.843	A
		2	1	(1, 2, 3)	183			183	194	0.0	0.0	0.033	A
	Exit	1	1		631			631	631	0.0	0.0	0.000	A
2	Entry	1	1	3	294	991	0.296	293	293	0.4	0.4	5.053	A
			2	1, 2, (3)	327	991	0.330	329	327	0.5	0.4	5.169	A
		2	1	(1, 2, 3)	621			621	620	0.0	0.0	0.000	A
	Exit	1	1		676			676	684	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	710	708	1.002	708	707	13.5	13.9	69.642	F
			2	(2), 3	306	708	0.432	308	314	1.0	0.9	12.353	B
		2	1	(1, 2, 3)	1147			1016	1022	31.2	65.1	176.489	F
	Exit	1	1		514			514	521	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	49	923	0.053	49	47	0.1	0.1	4.501	A
			2	1, 3	103	923	0.111	103	109	0.1	0.1	4.839	A
		2	1	(1, 2, 3)	152			152	156	0.0	0.0	0.036	A
	Exit	1	1		606			606	601	0.0	0.0	0.000	A
2	Entry	1	1	3	238	998	0.239	239	240	0.4	0.3	4.842	A
			2	1, 2, (3)	275	998	0.276	276	273	0.4	0.3	4.854	A
		2	1	(1, 2, 3)	513			513	512	0.0	0.0	0.000	A
	Exit	1	1		664			664	661	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	709	719	0.986	719	716	13.9	12.3	67.065	F
			2	(2), 3	300	719	0.418	304	304	0.9	0.9	12.317	B
		2	1	(1, 2, 3)	923			1009	1014	65.1	46.1	199.798	F
	Exit	1	1		420			420	428	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	38	952	0.040	39	41	0.1	0.0	4.244	A
			2	1, 3	89	952	0.094	89	93	0.1	0.1	4.678	A
		2	1	(1, 2, 3)	127			127	133	0.0	0.0	0.009	A
	Exit	1	1		510			510	537	0.0	0.0	0.000	A
2	Entry	1	1	3	200	1003	0.199	200	202	0.3	0.2	4.696	A
			2	1, 2, (3)	217	1003	0.217	216	225	0.3	0.4	4.607	A
		2	1	(1, 2, 3)	417			417	427	0.0	0.0	0.000	A
	Exit	1	1		573			573	617	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	631	733	0.861	653	683	12.3	6.7	50.943	F
			2	(2), 3	240	733	0.328	241	271	0.9	0.6	9.940	A
		2	1	(1, 2, 3)	778			871	930	46.1	10.6	84.080	F
	Exit	1	1		356			356	360	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	39	10	1147	973	0.040	40	40	0.0	0.0	4.052	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	92	23	1147	974	0.094	91	89	0.0	0.1	4.345	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	39	10	-	-	-	39	40	0.0	0.0	0.000	A
				3	92	23	-	-	-	92	89	0.0	0.0	0.008	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	210	52	1033	1003	0.209	210	203	0.0	0.3	4.595	A
			2	1	161	40	1033	1003	0.160	161	159	0.0	0.2	4.731	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	64	16	1033	1003	0.063	63	65	0.0	0.0	3.892	A
		2	1	1	161	40	-	-	-	161	160	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	274	68	-	-	-	274	270	0.0	0.0	0.000	A
3	Entry	1	1	1	310	77	777	729	0.425	308	298	0.0	1.9	19.457	C
				2	275	69	777	729	0.378	276	274	0.0	1.4	17.307	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	200	50	777	729	0.274	201	194	0.0	0.3	6.542	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	309	77	-	-	-	310	305	0.0	0.0	0.221	A
				2	475	119	-	-	-	475	475	0.0	0.1	0.195	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	1147	944	0.050	48	49	0.0	0.0	4.159	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	1147	944	0.111	105	109	0.1	0.1	4.504	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	-	-	-	47	49	0.0	0.0	0.014	A
				3	105	26	-	-	-	105	109	0.0	0.0	0.048	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	237	59	1033	998	0.238	238	246	0.3	0.3	4.768	A
			2	1	192	48	1033	998	0.192	193	189	0.2	0.2	5.095	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	75	19	1033	998	0.075	75	80	0.0	0.1	4.240	A
		2	1	1	192	48	-	-	-	192	189	0.0	0.0	0.002	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	312	78	-	-	-	312	326	0.0	0.0	0.000	A
3	Entry	1	1	1	365	91	777	720	0.507	364	362	1.9	4.1	35.529	E
				2	309	77	777	720	0.429	307	302	1.4	3.0	33.354	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	254	63	777	720	0.352	253	258	0.3	0.6	8.347	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	369	92	-	-	-	365	371	0.0	0.8	4.404	A
				2	569	142	-	-	-	562	568	0.1	1.2	4.332	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	1147	930	0.061	56	56	0.0	0.1	4.427	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	133	33	1147	929	0.143	132	136	0.1	0.2	4.736	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	-	-	-	56	56	0.0	0.0	0.020	A
				3	133	33	-	-	-	133	137	0.0	0.0	0.041	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	289	72	1033	989	0.293	289	294	0.3	0.4	5.179	A
			2	1	230	57	1033	988	0.233	230	235	0.2	0.4	5.468	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	93	23	1033	988	0.094	94	96	0.1	0.1	4.432	A
		2	1	1	230	57	-	-	-	230	235	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	382	96	-	-	-	382	390	0.0	0.0	0.000	A
3	Entry	1	1	1	402	100	777	709	0.566	396	395	4.1	7.7	60.302	F
				2	297	74	777	710	0.418	293	301	3.0	5.9	59.432	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	304	76	777	710	0.428	301	306	0.6	1.0	10.947	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	453	113	-	-	-	402	409	0.8	11.9	56.157	F
				2	703	176	-	-	-	601	619	1.2	19.4	56.511	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	1147	921	0.065	59	61	0.1	0.1	4.557	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	124	31	1147	922	0.134	124	133	0.2	0.1	4.843	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	-	-	-	59	61	0.0	0.0	0.021	A
				3	124	31	-	-	-	124	133	0.0	0.0	0.038	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	294	73	1033	992	0.296	293	293	0.4	0.4	5.053	A
			2	1	232	58	1033	991	0.234	233	233	0.4	0.3	5.448	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	95	24	1033	991	0.096	96	94	0.1	0.1	4.455	A
		2	1	1	232	58	-	-	-	232	233	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	389	97	-	-	-	389	388	0.0	0.0	0.000	A
3	Entry	1	1	1	399	100	777	709	0.563	398	398	7.7	7.7	69.552	F
				2	311	78	777	708	0.439	309	309	5.9	6.1	69.757	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	306	76	777	708	0.432	308	314	1.0	0.9	12.353	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	454	114	-	-	-	399	398	11.9	26.0	177.554	F
				2	692	173	-	-	-	617	624	19.4	39.1	175.799	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1147	922	0.053	49	47	0.1	0.1	4.501	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	103	26	1147	922	0.111	103	109	0.1	0.1	4.839	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	-	-	-	49	47	0.0	0.0	0.033	A
				3	103	26	-	-	-	103	109	0.0	0.0	0.038	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	238	60	1033	999	0.239	239	240	0.4	0.3	4.842	A
			2	1	196	49	1033	999	0.197	197	194	0.3	0.2	5.098	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	79	20	1033	999	0.079	79	79	0.1	0.1	4.236	A
		2	1	1	196	49	-	-	-	196	194	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	317	79	-	-	-	317	319	0.0	0.0	0.000	A
3	Entry	1	1	1	404	101	777	719	0.562	409	407	7.7	7.0	67.366	F
				2	305	76	777	719	0.424	311	309	6.1	5.3	66.668	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	300	75	777	719	0.417	304	304	0.9	0.9	12.317	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	365	91	-	-	-	404	404	26.0	18.2	201.039	F
				2	558	140	-	-	-	605	610	39.1	27.9	198.980	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	10	1147	949	0.040	39	41	0.1	0.0	4.244	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	89	22	1147	951	0.094	89	93	0.1	0.1	4.678	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	10	-	-	-	38	40	0.0	0.0	0.000	A
				3	89	22	-	-	-	89	93	0.0	0.0	0.012	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	200	50	1033	1003	0.199	200	202	0.3	0.2	4.696	A
			2	1	150	37	1033	1003	0.149	150	160	0.2	0.2	4.843	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	67	17	1033	1004	0.067	66	65	0.1	0.2	4.004	A
		2	1	1	150	37	-	-	-	150	160	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	267	67	-	-	-	267	267	0.0	0.0	0.000	A
3	Entry	1	1	1	349	87	777	732	0.476	360	377	7.0	3.8	51.974	F
				2	282	70	777	732	0.385	293	306	5.3	2.9	49.674	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	240	60	777	732	0.328	241	271	0.9	0.6	9.940	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	309	77	-	-	-	349	364	18.2	4.2	84.378	F
				2	469	117	-	-	-	522	565	27.9	6.4	83.885	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | 2a WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	11.70	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.70	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2038	2a WD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	513	100.000
2		ONE HOUR	✓	691	100.000
3		ONE HOUR	✓	791	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	163	350
	2	95	0	596
	3	255	536	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	2	0
	2	6	0	3
	3	3	3	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.44	6.34	1.0	A	466	699
2	0.43	6.43	1.4	A	633	949
3	0.79	19.71	4.7	C	727	1091

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	386	96	405	1352	0.285	385	389	259	0.0	0.6	4.688	A
2	533	133	261	1842	0.289	533	519	530	0.0	0.7	4.990	A
3	594	149	70	1134	0.524	595	596	725	0.0	1.6	9.156	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	456	114	467	1350	0.338	454	468	314	0.6	0.7	5.233	A
2	610	152	311	1816	0.336	613	624	610	0.7	0.8	5.555	A
3	705	176	82	1180	0.597	699	711	842	1.6	2.5	11.967	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	557	139	600	1273	0.438	558	573	377	0.7	0.9	6.205	A
2	765	191	381	1761	0.435	766	763	778	0.8	1.3	6.140	A
3	877	219	106	1111	0.790	872	871	1042	2.5	4.4	18.708	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
2	763	191	387	1760	0.433	764	769	766	1.3	1.4	6.429	A
3	872	218	107	1150	0.758	872	882	1044	4.4	4.7	19.713	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	453	113	490	1350	0.335	454	464	309	1.0	0.7	5.271	A
2	619	155	309	1807	0.342	619	629	635	1.4	1.0	5.632	A
3	716	179	84	1116	0.641	714	730	843	4.7	2.1	12.938	B

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	383	96	403	1363	0.281	383	394	269	0.7	0.5	4.664	A
2	508	127	264	1842	0.276	510	519	521	1.0	0.8	4.993	A
3	600	150	69	1111	0.540	602	609	704	2.1	1.4	9.511	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	125	999	0.125	124	124	0.0	0.2	4.112	A
			2	1, 3	261	999	0.261	261	265	0.0	0.3	4.840	A
		2	1	(1, 2, 3)	386			385	391	0.0	0.0	0.077	A
	Exit	1	1		259			259	262	0.0	0.0	0.000	A
2	Entry	1	1	3	330	946	0.349	330	318	0.0	0.5	5.245	A
			2	1, 2, (3)	203	946	0.214	203	200	0.0	0.2	4.579	A
		2	1	(1, 2, 3)	533			533	521	0.0	0.0	0.000	A
	Exit	1	1		530			530	531	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	451	756	0.597	452	450	0.0	1.3	10.247	B
			2	(2), 3	143	756	0.189	142	146	0.0	0.3	5.803	A
		2	1	(1, 2, 3)	594			594	602	0.0	0.0	0.000	A
	Exit	1	1		725			725	711	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	143	977	0.147	143	149	0.2	0.2	4.492	A
			2	1, 3	313	977	0.320	311	319	0.3	0.5	5.267	A
		2	1	(1, 2, 3)	456			456	469	0.0	0.0	0.208	A
	Exit	1	1		314			314	319	0.0	0.0	0.000	A
2	Entry	1	1	3	375	929	0.404	378	377	0.5	0.5	5.975	A
			2	1, 2, (3)	234	929	0.252	236	247	0.2	0.3	4.906	A
		2	1	(1, 2, 3)	610			610	624	0.0	0.0	0.000	A
	Exit	1	1		610			610	629	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	520	752	0.691	516	521	1.3	2.1	14.079	B
			2	(2), 3	185	752	0.246	183	191	0.3	0.4	6.008	A
		2	1	(1, 2, 3)	705			705	715	0.0	0.0	0.041	A
	Exit	1	1		842			842	855	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	176	928	0.190	177	181	0.2	0.2	4.921	A
			2	1, 3	381	928	0.411	381	392	0.5	0.6	6.156	A
		2	1	(1, 2, 3)	557			557	573	0.0	0.1	0.433	A
	Exit	1	1		377			377	385	0.0	0.0	0.000	A
2	Entry	1	1	3	463	906	0.511	463	460	0.5	0.9	6.659	A
			2	1, 2, (3)	302	906	0.334	303	303	0.3	0.5	5.349	A
		2	1	(1, 2, 3)	765			765	765	0.0	0.0	0.000	A
	Exit	1	1		778			778	773	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	626	746	0.839	621	620	2.1	3.9	22.379	C
			2	(2), 3	251	746	0.336	251	251	0.4	0.4	7.230	A
		2	1	(1, 2, 3)	877			876	878	0.0	0.1	0.639	A
	Exit	1	1		1042			1042	1049	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	176	932	0.189	177	178	0.2	0.2	4.879	A
			2	1, 3	386	932	0.414	387	390	0.6	0.7	6.251	A
		2	1	(1, 2, 3)	563			563	568	0.1	0.1	0.512	A
	Exit	1	1		390			390	389	0.0	0.0	0.000	A
2	Entry	1	1	3	455	904	0.503	455	461	0.9	1.0	7.088	A
			2	1, 2, (3)	308	904	0.340	309	308	0.5	0.4	5.432	A
		2	1	(1, 2, 3)	763			763	769	0.0	0.0	0.000	A
	Exit	1	1		766			766	777	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	622	745	0.835	622	626	3.9	4.1	23.679	C
			2	(2), 3	249	745	0.334	250	257	0.4	0.5	7.412	A
		2	1	(1, 2, 3)	872			871	883	0.1	0.1	0.778	A
	Exit	1	1		1044			1044	1054	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	145	969	0.149	146	150	0.2	0.2	4.442	A
			2	1, 3	308	969	0.318	309	315	0.7	0.5	5.391	A
		2	1	(1, 2, 3)	453			453	463	0.1	0.0	0.186	A
	Exit	1	1		309			309	320	0.0	0.0	0.000	A
2	Entry	1	1	3	377	930	0.406	377	384	1.0	0.7	6.049	A
			2	1, 2, (3)	241	930	0.259	242	246	0.4	0.4	4.979	A
		2	1	(1, 2, 3)	619			619	628	0.0	0.0	0.000	A
	Exit	1	1		635			635	645	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	525	752	0.698	524	536	4.1	1.7	15.083	C
			2	(2), 3	191	752	0.254	190	193	0.5	0.4	6.243	A
		2	1	(1, 2, 3)	716			716	720	0.1	0.0	0.253	A
	Exit	1	1		843			843	858	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	119	1000	0.119	119	125	0.2	0.1	4.128	A
			2	1, 3	264	1000	0.264	264	268	0.5	0.4	4.783	A
		2	1	(1, 2, 3)	383			383	393	0.0	0.0	0.087	A
	Exit	1	1		269			269	271	0.0	0.0	0.000	A
2	Entry	1	1	3	316	945	0.334	318	320	0.7	0.4	5.249	A
			2	1, 2, (3)	193	945	0.204	192	199	0.4	0.3	4.579	A
		2	1	(1, 2, 3)	508			508	517	0.0	0.0	0.000	A
	Exit	1	1		521			521	535	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	451	756	0.596	454	455	1.7	1.1	10.816	B
			2	(2), 3	150	756	0.198	148	153	0.4	0.3	5.620	A
		2	1	(1, 2, 3)	600			600	606	0.0	0.0	0.001	A
	Exit	1	1		704			704	714	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	125	31	1147	1000	0.125	124	124	0.0	0.2	4.112	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	261	65	1147	999	0.261	261	265	0.0	0.3	4.840	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	125	31	-	-	-	125	125	0.0	0.0	0.039	A
				3	261	65	-	-	-	261	267	0.0	0.0	0.094	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	330	83	1033	946	0.349	330	318	0.0	0.5	5.245	A
			2	1	69	17	1033	946	0.073	70	73	0.0	0.1	5.032	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	133	33	1033	946	0.141	134	127	0.0	0.1	4.326	A
		2	1	1	69	17	-	-	-	69	74	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	463	116	-	-	-	463	448	0.0	0.0	0.000	A
3	Entry	1	1	1	188	47	777	756	0.249	189	189	0.0	0.6	10.937	B
				2	263	66	777	757	0.348	263	261	0.0	0.7	9.746	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	777	756	0.189	142	146	0.0	0.3	5.803	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	188	47	-	-	-	188	191	0.0	0.0	0.000	A
				2	406	102	-	-	-	406	411	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	1147	977	0.147	143	149	0.2	0.2	4.492	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	313	78	1147	977	0.320	311	319	0.3	0.5	5.267	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	-	-	-	143	149	0.0	0.0	0.164	A
				3	313	78	-	-	-	313	320	0.0	0.0	0.229	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	375	94	1033	929	0.404	378	377	0.5	0.5	5.975	A
			2	1	83	21	1033	929	0.089	82	88	0.1	0.1	5.420	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	152	38	1033	929	0.163	153	159	0.1	0.2	4.629	A
		2	1	1	83	21	-	-	-	83	88	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	527	132	-	-	-	527	536	0.0	0.0	0.000	A
3	Entry	1	1	1	233	58	777	752	0.309	231	231	0.6	1.0	14.841	B
				2	287	72	777	752	0.382	284	289	0.7	1.1	13.467	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	185	46	777	752	0.246	183	191	0.3	0.4	6.008	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	233	58	-	-	-	233	233	0.0	0.0	0.040	A
				2	472	118	-	-	-	472	482	0.0	0.0	0.041	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	176	44	1147	929	0.189	177	181	0.2	0.2	4.921	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	381	95	1147	928	0.411	381	392	0.5	0.6	6.156	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	176	44	-	-	-	176	181	0.0	0.0	0.332	A
				3	381	95	-	-	-	381	392	0.0	0.0	0.479	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	463	116	1033	906	0.511	463	460	0.5	0.9	6.659	A
			2	1	104	26	1033	906	0.115	106	106	0.1	0.1	5.864	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	198	49	1033	905	0.219	197	197	0.2	0.3	5.079	A
		2	1	1	104	26	-	-	-	104	106	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	661	165	-	-	-	661	659	0.0	0.0	0.000	A
3	Entry	1	1	1	273	68	777	745	0.366	272	279	1.0	1.8	23.563	C
				2	353	88	777	746	0.473	349	341	1.1	2.1	21.408	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	251	63	777	745	0.336	251	251	0.4	0.4	7.230	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	273	68	-	-	-	273	282	0.0	0.0	0.677	A
				2	604	151	-	-	-	603	596	0.0	0.1	0.621	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	176	44	1147	932	0.189	177	178	0.2	0.2	4.879	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	386	97	1147	932	0.414	387	390	0.6	0.7	6.251	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	176	44	-	-	-	176	178	0.0	0.0	0.411	A
				3	387	97	-	-	-	386	390	0.0	0.1	0.557	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	455	114	1033	904	0.503	455	461	0.9	1.0	7.088	A
			2	1	107	27	1033	904	0.118	107	105	0.1	0.1	6.120	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	201	50	1033	904	0.222	202	203	0.3	0.3	5.087	A
		2	1	1	107	27	-	-	-	107	105	0.0	0.0	0.001	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	656	164	-	-	-	656	664	0.0	0.0	0.000	A
3	Entry	1	1	1	282	71	777	745	0.379	283	284	1.8	1.9	24.954	C
				2	340	85	777	745	0.456	339	342	2.1	2.2	22.622	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	249	62	777	745	0.334	250	257	0.4	0.5	7.412	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	283	71	-	-	-	282	284	0.0	0.1	0.916	A
				2	590	147	-	-	-	589	599	0.1	0.1	0.713	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	145	36	1147	968	0.149	146	150	0.2	0.2	4.442	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	308	77	1147	968	0.319	309	315	0.7	0.5	5.391	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	144	36	-	-	-	145	150	0.0	0.0	0.098	A
				3	308	77	-	-	-	308	314	0.1	0.0	0.227	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	377	94	1033	930	0.406	377	384	1.0	0.7	6.049	A
			2	1	84	21	1033	929	0.091	84	85	0.1	0.2	5.468	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	157	39	1033	931	0.168	157	160	0.3	0.2	4.722	A
		2	1	1	84	21	-	-	-	84	86	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	534	134	-	-	-	534	542	0.0	0.0	0.000	A
3	Entry	1	1	1	226	56	777	752	0.300	224	235	1.9	0.8	15.984	C
				2	299	75	777	752	0.397	300	302	2.2	0.9	14.380	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	191	48	777	752	0.254	190	193	0.5	0.4	6.243	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	226	56	-	-	-	226	230	0.1	0.0	0.296	A
				2	490	122	-	-	-	490	489	0.1	0.0	0.232	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	119	30	1147	1000	0.119	119	125	0.2	0.1	4.128	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	264	66	1147	1001	0.264	264	268	0.5	0.4	4.783	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	119	30	-	-	-	119	125	0.0	0.0	0.057	A
				3	264	66	-	-	-	264	268	0.0	0.0	0.101	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	316	79	1033	944	0.334	318	320	0.7	0.4	5.249	A
			2	1	70	17	1033	945	0.074	69	73	0.2	0.1	5.022	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	123	31	1033	945	0.130	123	126	0.2	0.2	4.334	A
		2	1	1	70	17	-	-	-	70	73	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	439	110	-	-	-	439	445	0.0	0.0	0.000	A
3	Entry	1	1	1	199	50	777	756	0.263	200	199	0.8	0.5	11.649	B
				2	252	63	777	756	0.333	254	257	0.9	0.6	10.177	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	150	37	777	756	0.198	148	153	0.4	0.3	5.620	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	199	50	-	-	-	199	197	0.0	0.0	0.001	A
				2	402	100	-	-	-	402	408	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

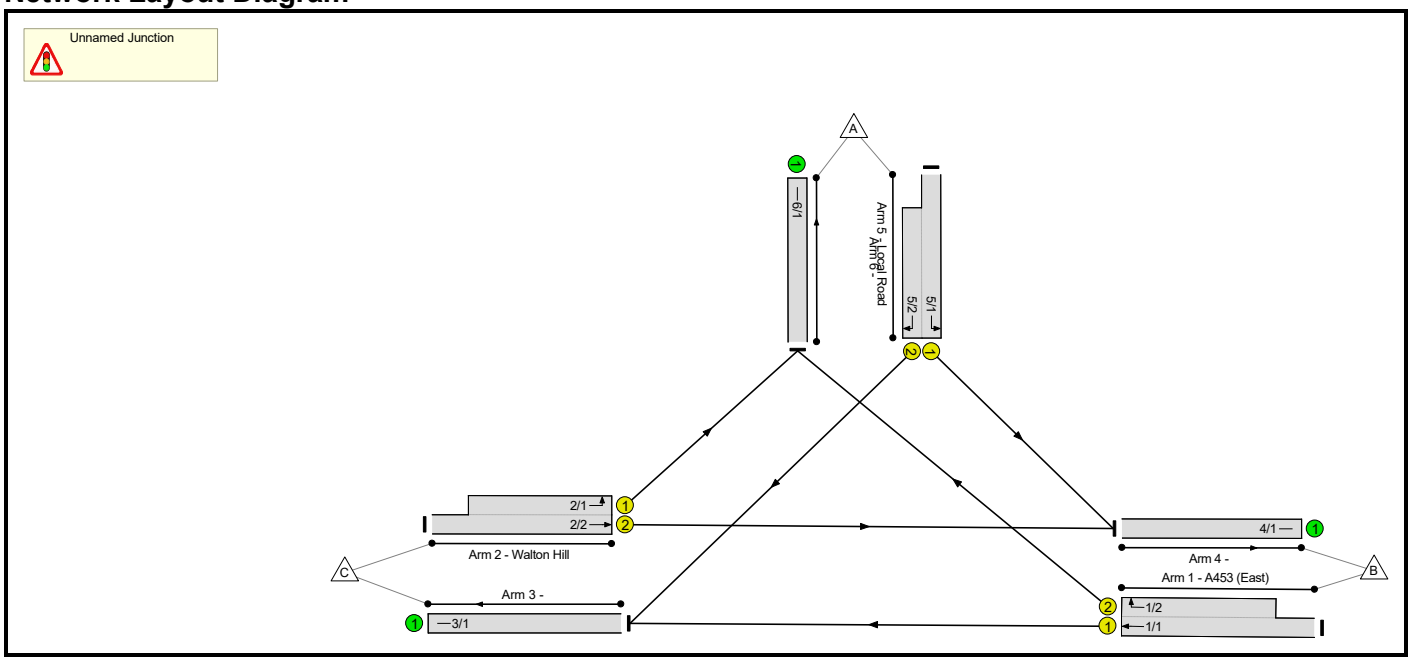
APPENDIX 55: Junction 10: A453/Walton Hill Signal Junction Stage 1A/2A Modelling Results

Full Input Data And Results

User and Project Details

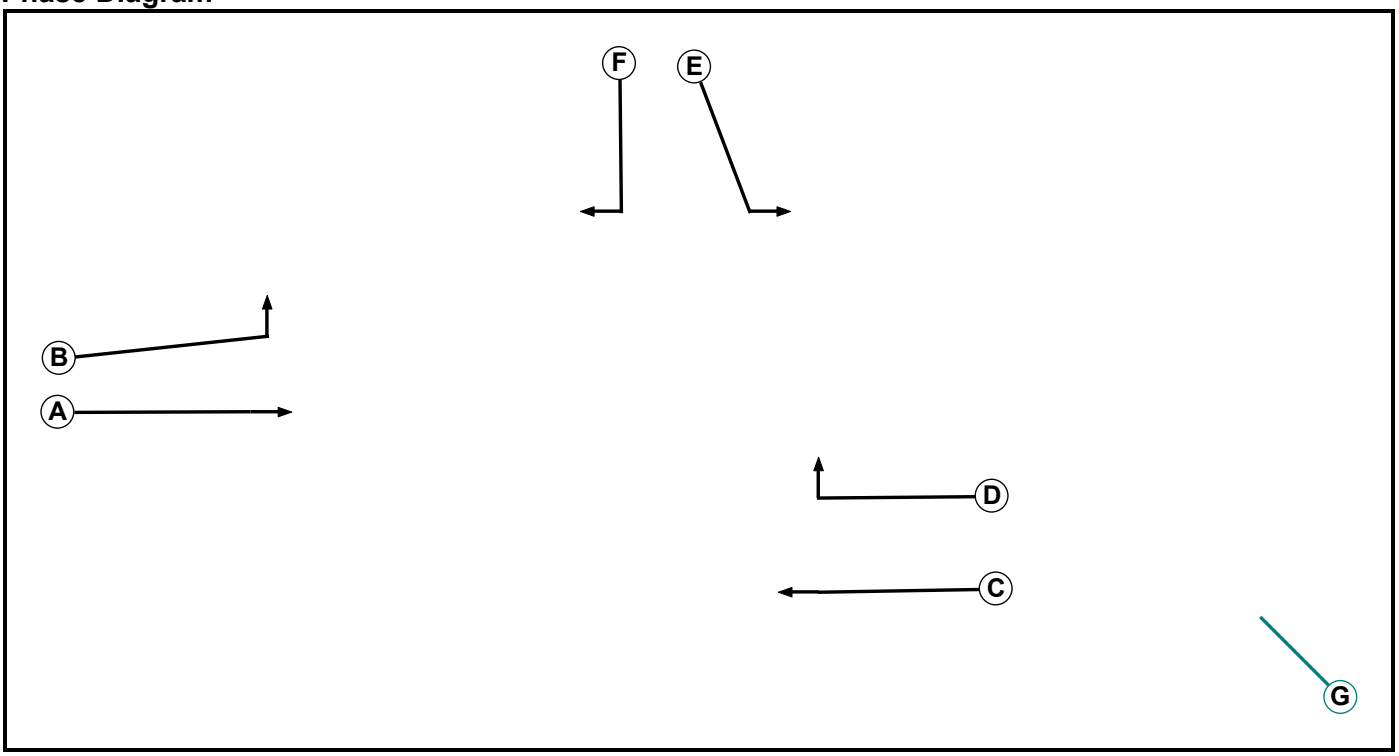
Project:	**East Midlands Gateway Phase 2**
Title:	**A453 Walton Hill Junction**
Location:	
Client:	SEGRO
Site Ref(s):	Junction 10
Date Completed:	27/03/24
Checked By:	[redacted]
Additional detail:	Phase B added to run in stage 3 as per on site observations
File name:	250619 A453_Local Road Signal Junction_Stage 1a+2a.lsg3x
Author:	[redacted]
Company:	BWB
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Dummy		4	4

Full Input Data And Results

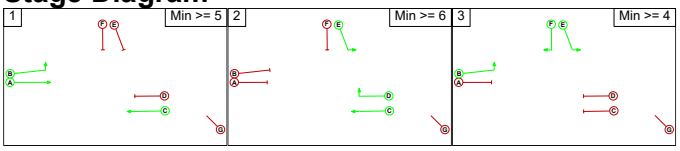
Phase Intergreens Matrix

Terminating Phase	Starting Phase							
		A	B	C	D	E	F	G
	A		-	-	6	7	6	3
	B	-		-	5	-	-	3
	C	-	-		-	-	5	3
	D	6	8	-		-	5	3
	E	3	-	-	-		-	3
	F	6	-	6	6	-		3
	G	2	2	2	2	2	2	

Phases in Stage

Stage No.	Phases in Stage
1	A B C
2	C D E
3	B E F

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
2	1	E	Losing	2	2

Prohibited Stage Change

From Stage	To Stage			
		1	2	3
	1		7	7
	2	8		8
	3	6	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (A453 (East))	U	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 3 Ahead	Inf
1/2 (A453 (East))	U	D	2	3	19.1	Geom	-	3.50	0.00	Y	Arm 6 Right	20.00
2/1 (Walton Hill)	U	B	2	3	13.9	Geom	-	3.50	0.00	Y	Arm 6 Left	20.00
2/2 (Walton Hill)	U	A	2	3	60.0	Geom	-	3.50	0.00	N	Arm 4 Ahead	Inf
3/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Local Road)	U	E	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Left	15.00
5/2 (Local Road)	U	F	2	3	13.0	Geom	-	3.50	0.00	Y	Arm 3 Right	20.00
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 Observed (AM) (Current Scenario)'	07:45	08:45	01:00	
2: '2022 Observed (PM)'	17:00	18:00	01:00	
3: '2028 Forecast Year Without Development (AM)'	07:45	08:45	01:00	
4: '2028 Forecast Year Without Development (PM)'	17:00	18:00	01:00	
5: '2028 Forecast Year With Development (AM)'	07:45	08:45	01:00	
6: '2028 Forecast Year With Development (PM)'	17:00	18:00	01:00	
7: '2038 Forecast Year Without Development (AM)'	07:45	08:45	01:00	
8: '2038 Forecast Year Without Development (PM)'	17:00	18:00	01:00	
9: '2038 Forecast Year With Development (AM)'	07:45	08:45	01:00	
10: '2038 Forecast Year With Development (PM)'	17:00	18:00	01:00	
11: '2a 2028 Forecast Year with Dev (AM)'	07:45	08:45	01:00	
12: '2a 2028 Forecast Year with Dev (PM)'	17:00	18:00	01:00	
13: '2a 2038 Forecast Year with Dev (AM)'	07:45	08:45	01:00	
14: '2a 2038 Forecast Year with Dev (PM)'	17:00	18:00	01:00	

Scenario 1: '2022 Observed (AM)' (FG1: '2022 Observed (AM) (Current Scenario)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	520	287	807
	B	215	0	189	404
	C	314	406	0	720
	Tot.	529	926	476	1931

Traffic Lane Flows

Lane	Scenario 1: 2022 Observed (AM)
Junction: Unnamed Junction	
1/1 (with short)	404(In) 189(Out)
1/2 (short)	215
2/1 (short)	314
2/2 (with short)	720(In) 406(Out)
3/1	476
4/1	926
5/1 (with short)	807(In) 520(Out)
5/2 (short)	287
6/1	529

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2022 Observed (PM)' (FG2: '2022 Observed (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	228	289	517
	B	343	0	288	631
	C	227	187	0	414
	Tot.	570	415	577	1562

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2022 Observed (PM)
Junction: Unnamed Junction	
1/1 (with short)	631(In) 288(Out)
1/2 (short)	343
2/1 (short)	227
2/2 (with short)	414(In) 187(Out)
3/1	577
4/1	415
5/1 (with short)	517(In) 228(Out)
5/2 (short)	289
6/1	570

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2028 Forecast Year Without Development (AM)' (FG3: '2028 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	674	373	1047
	B	347	0	238	585
	C	319	325	0	644
	Tot.	666	999	611	2276

Traffic Lane Flows

Lane	Scenario 3: 2028 Forecast Year Without Development (AM)
Junction: Unnamed Junction	
1/1 (with short)	585(In) 238(Out)
1/2 (short)	347
2/1 (short)	319
2/2 (with short)	644(In) 325(Out)
3/1	611
4/1	999
5/1 (with short)	1047(In) 674(Out)
5/2 (short)	373
6/1	666

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2028 Forecast Year Without Development (PM)' (FG4: '2028 Forecast Year Without Development (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	303	419	722
	B	406	0	398	804
	C	203	177	0	380
	Tot.	609	480	817	1906

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2028 Forecast Year Without Development (PM)
Junction: Unnamed Junction	
1/1 (with short)	804(In) 398(Out)
1/2 (short)	406
2/1 (short)	203
2/2 (with short)	380(In) 177(Out)
3/1	817
4/1	480
5/1 (with short)	722(In) 303(Out)
5/2 (short)	419
6/1	609

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '2028 Forecast Year With Development (AM)' (FG5: '2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	749	355	1104
	B	337	0	209	546
	C	321	343	0	664
	Tot.	658	1092	564	2314

Traffic Lane Flows

Lane	Scenario 5: 2028 Forecast Year With Development (AM)
Junction: Unnamed Junction	
1/1 (with short)	546(In) 209(Out)
1/2 (short)	337
2/1 (short)	321
2/2 (with short)	664(In) 343(Out)
3/1	564
4/1	1092
5/1 (with short)	1104(In) 749(Out)
5/2 (short)	355
6/1	658

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2028 Forecast Year With Development (PM)' (FG6: '2028 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	288	432	720
	B	425	0	412	837
	C	191	158	0	349
	Tot.	616	446	844	1906

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2028 Forecast Year With Development (PM)
Junction: Unnamed Junction	
1/1 (with short)	837(In) 412(Out)
1/2 (short)	425
2/1 (short)	191
2/2 (with short)	349(In) 158(Out)
3/1	844
4/1	446
5/1 (with short)	720(In) 288(Out)
5/2 (short)	432
6/1	616

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '2038 Forecast Year Without Development (AM)' (FG7: '2038 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	624	515	1139
	B	405	0	302	707
	C	676	510	0	1186
	Tot.	1081	1134	817	3032

Traffic Lane Flows

Lane	Scenario 7: 2038 Forecast Year Without Development (AM)
Junction: Unnamed Junction	
1/1 (with short)	707(In) 302(Out)
1/2 (short)	405
2/1 (short)	676
2/2 (with short)	1186(In) 510(Out)
3/1	817
4/1	1134
5/1 (with short)	1139(In) 624(Out)
5/2 (short)	515
6/1	1081

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2038 Forecast Year Without Development (PM)' (FG8: '2038 Forecast Year Without Development (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	451	749	1200
	B	480	0	458	938
	C	599	446	0	1045
	Tot.	1079	897	1207	3183

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2038 Forecast Year Without Development (PM)
Junction: Unnamed Junction	
1/1 (with short)	938(In) 458(Out)
1/2 (short)	480
2/1 (short)	599
2/2 (with short)	1045(In) 446(Out)
3/1	1207
4/1	897
5/1 (with short)	1200(In) 451(Out)
5/2 (short)	749
6/1	1079

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 9: '2038 Forecast Year With Development (AM)' (FG9: '2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	659	468	1127
	B	411	0	268	679
	C	693	531	0	1224
	Tot.	1104	1190	736	3030

Traffic Lane Flows

Lane	Scenario 9: 2038 Forecast Year With Development (AM)
Junction: Unnamed Junction	
1/1 (with short)	679(In) 268(Out)
1/2 (short)	411
2/1 (short)	693
2/2 (with short)	1224(In) 531(Out)
3/1	736
4/1	1190
5/1 (with short)	1127(In) 659(Out)
5/2 (short)	468
6/1	1104

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 10: '2038 Forecast Year With Development (PM)' (FG10: '2038 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	451	794	1245
	B	525	0	489	1014
	C	603	421	0	1024
	Tot.	1128	872	1283	3283

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 10: 2038 Forecast Year With Development (PM)
Junction: Unnamed Junction	
1/1 (with short)	1014(In) 489(Out)
1/2 (short)	525
2/1 (short)	603
2/2 (with short)	1024(In) 421(Out)
3/1	1283
4/1	872
5/1 (with short)	1245(In) 451(Out)
5/2 (short)	794
6/1	1128

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 11: '2a 2028 Forecast Year with Dev' (FG11: '2a 2028 Forecast Year with Dev (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	716	367	1083
	B	330	0	229	559
	C	321	354	0	675
	Tot.	651	1070	596	2317

Traffic Lane Flows

Lane	Scenario 11: 2a 2028 Forecast Year with Dev
Junction: Unnamed Junction	
1/1 (with short)	559(In) 229(Out)
1/2 (short)	330
2/1 (short)	321
2/2 (with short)	675(In) 354(Out)
3/1	596
4/1	1070
5/1 (with short)	1083(In) 716(Out)
5/2 (short)	367
6/1	651

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 12: '2a 2028 Forecast Year with Dev' (FG12: '2a 2028 Forecast Year with Dev (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	365	456	821
	B	453	0	397	850
	C	158	142	0	300
	Tot.	611	507	853	1971

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 12: 2a 2028 Forecast Year with Dev
Junction: Unnamed Junction	
1/1 (with short)	850(In) 397(Out)
1/2 (short)	453
2/1 (short)	158
2/2 (with short)	300(In) 142(Out)
3/1	853
4/1	507
5/1 (with short)	821(In) 365(Out)
5/2 (short)	456
6/1	611

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 13: '2a 2038 Forecast Year with Dev' (FG13: '2a 2038 Forecast Year with Dev (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	615	473	1088
	B	369	0	287	656
	C	685	575	0	1260
	Tot.	1054	1190	760	3004

Traffic Lane Flows

Lane	Scenario 13: 2a 2038 Forecast Year with Dev
Junction: Unnamed Junction	
1/1 (with short)	656(In) 287(Out)
1/2 (short)	369
2/1 (short)	685
2/2 (with short)	1260(In) 575(Out)
3/1	760
4/1	1190
5/1 (with short)	1088(In) 615(Out)
5/2 (short)	473
6/1	1054

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 14: '2a 2038 Forecast Year with Dev' (FG14: '2a 2038 Forecast Year with Dev (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	406	782	1188
	B	498	0	496	994
	C	619	413	0	1032
	Tot.	1117	819	1278	3214

Full Input Data And Results

Traffic Lane Flows

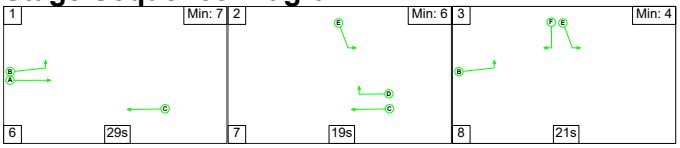
Lane	Scenario 14: 2a 2038 Forecast Year with Dev
Junction: Unnamed Junction	
1/1 (with short)	994(In) 496(Out)
1/2 (short)	498
2/1 (short)	619
2/2 (with short)	1032(In) 413(Out)
3/1	1278
4/1	819
5/1 (with short)	1188(In) 406(Out)
5/2 (short)	782
6/1	1117

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2022 Observed (AM)' (FG1: '2022 Observed (AM) (Current Scenario)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

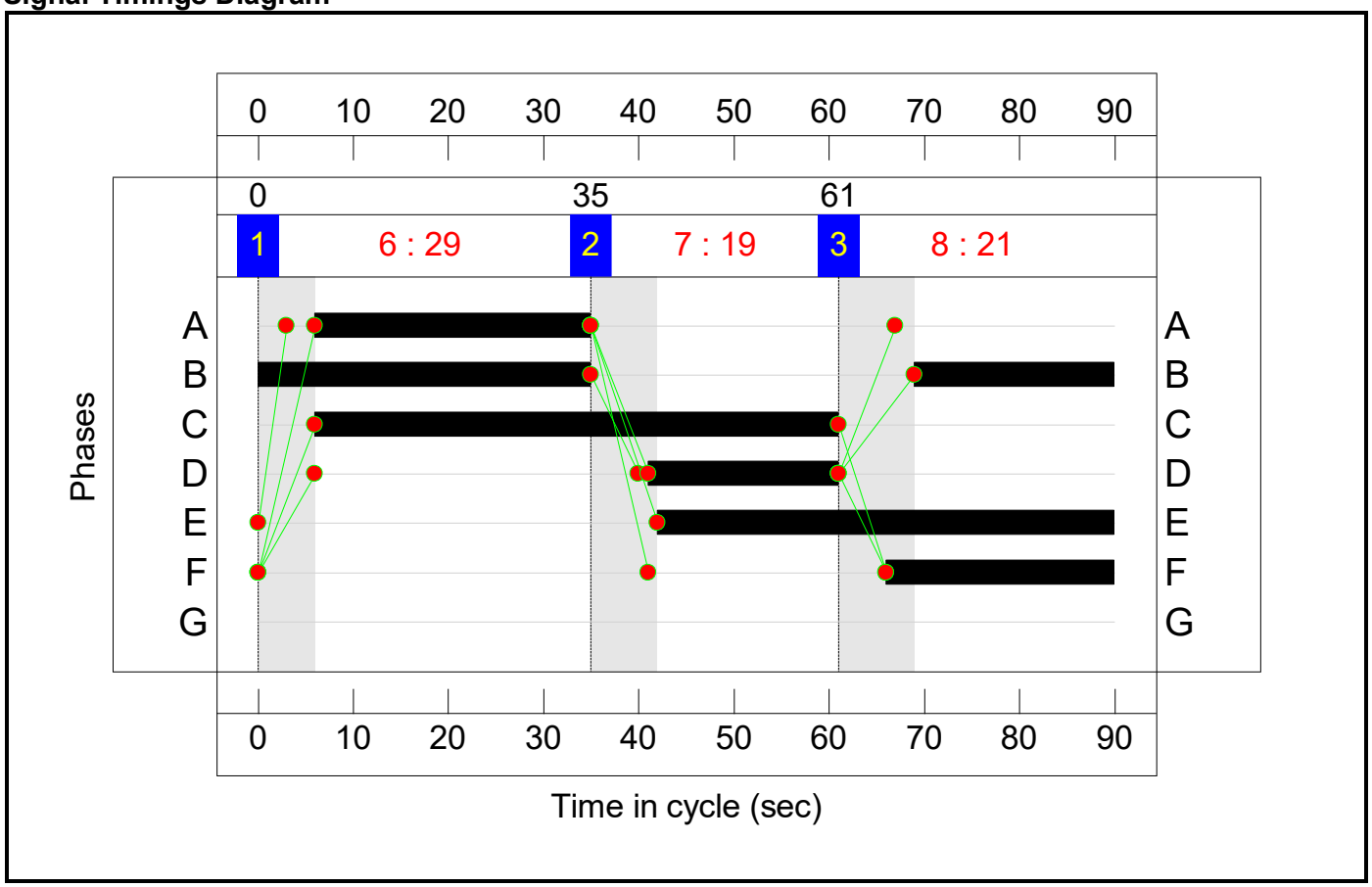


Full Input Data And Results

Stage Timings

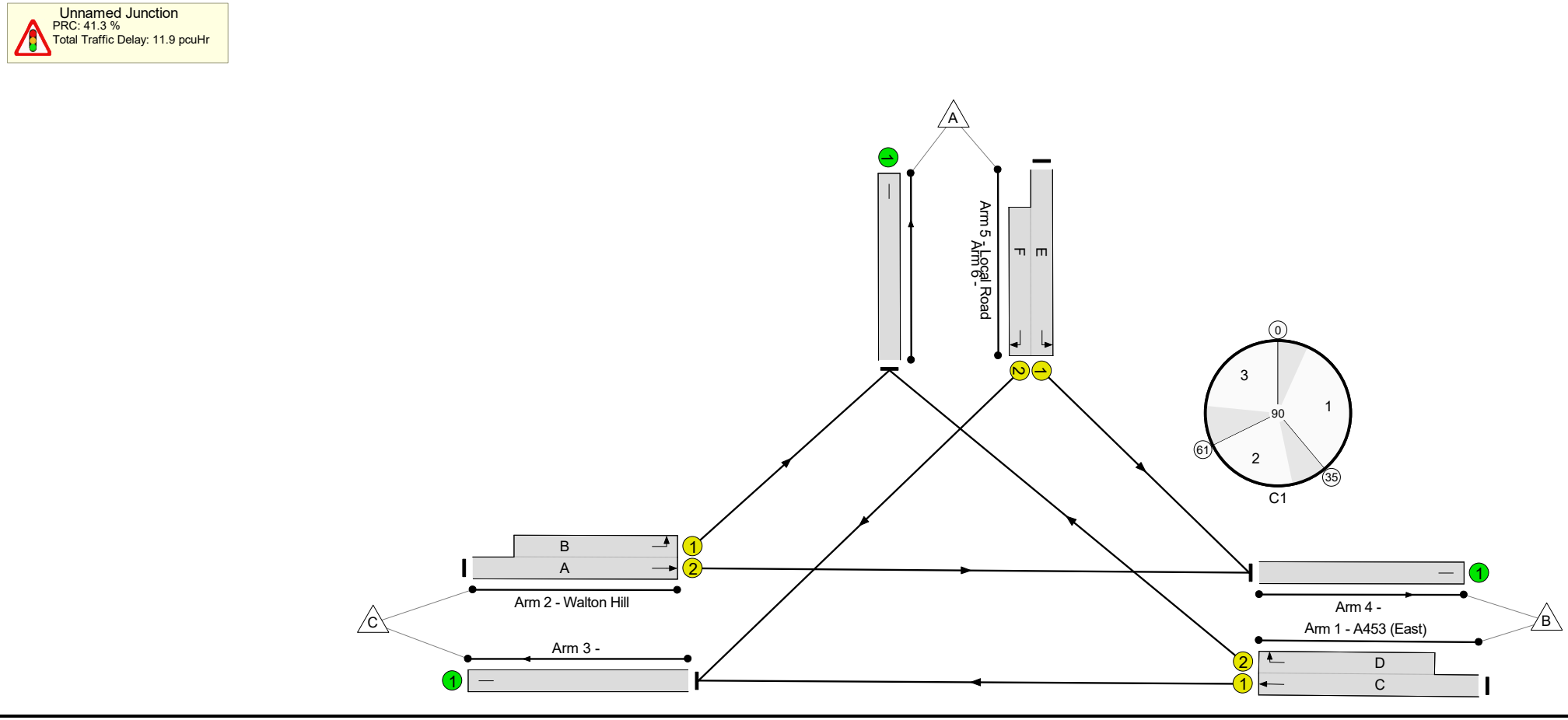
Stage	1	2	3
Duration	29	19	21
Change Point	0	35	61

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.7%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.7%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	55:20	-	404	1965:1828	375+427	50.4 : 50.4%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	29:56	-	720	2105:1828	645+499	63.0 : 63.0%
3/1		U	N/A	N/A	-		-	-	-	476	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	926	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	48:24	-	807	1786:1828	817+451	63.7 : 63.7%
6/1		U	N/A	N/A	-		-	-	-	529	Inf	Inf	0.0%

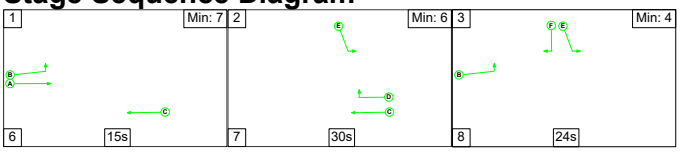
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	**-**	**-**	**0**	**0**	**0**	**9.7**	**2.2**	**0.0**	**11.9**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**9.7**	**2.2**	**0.0**	**11.9**	**-**	**-**	**-**	**-**
1/1+1/2	404	404	-	-	-	2.2	0.5	-	2.7	23.8	4.7	0.5	5.2
2/2+2/1	720	720	-	-	-	3.4	0.8	-	4.3	21.4	8.3	0.8	9.2
3/1	476	476	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	926	926	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	807	807	-	-	-	4.1	0.9	-	5.0	22.3	8.2	0.9	9.1
6/1	529	529	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 41.3 Total Delay for Signalled Lanes (pcuHr): 11.95 Cycle Time (s): 90
PRC Over All Lanes (%): 41.3 Total Delay Over All Lanes(pcuHr): 11.95

Full Input Data And Results

Scenario 2: '2022 Observed (PM)' (FG2: '2022 Observed (PM)', Plan 1: 'Network Control Plan 1')

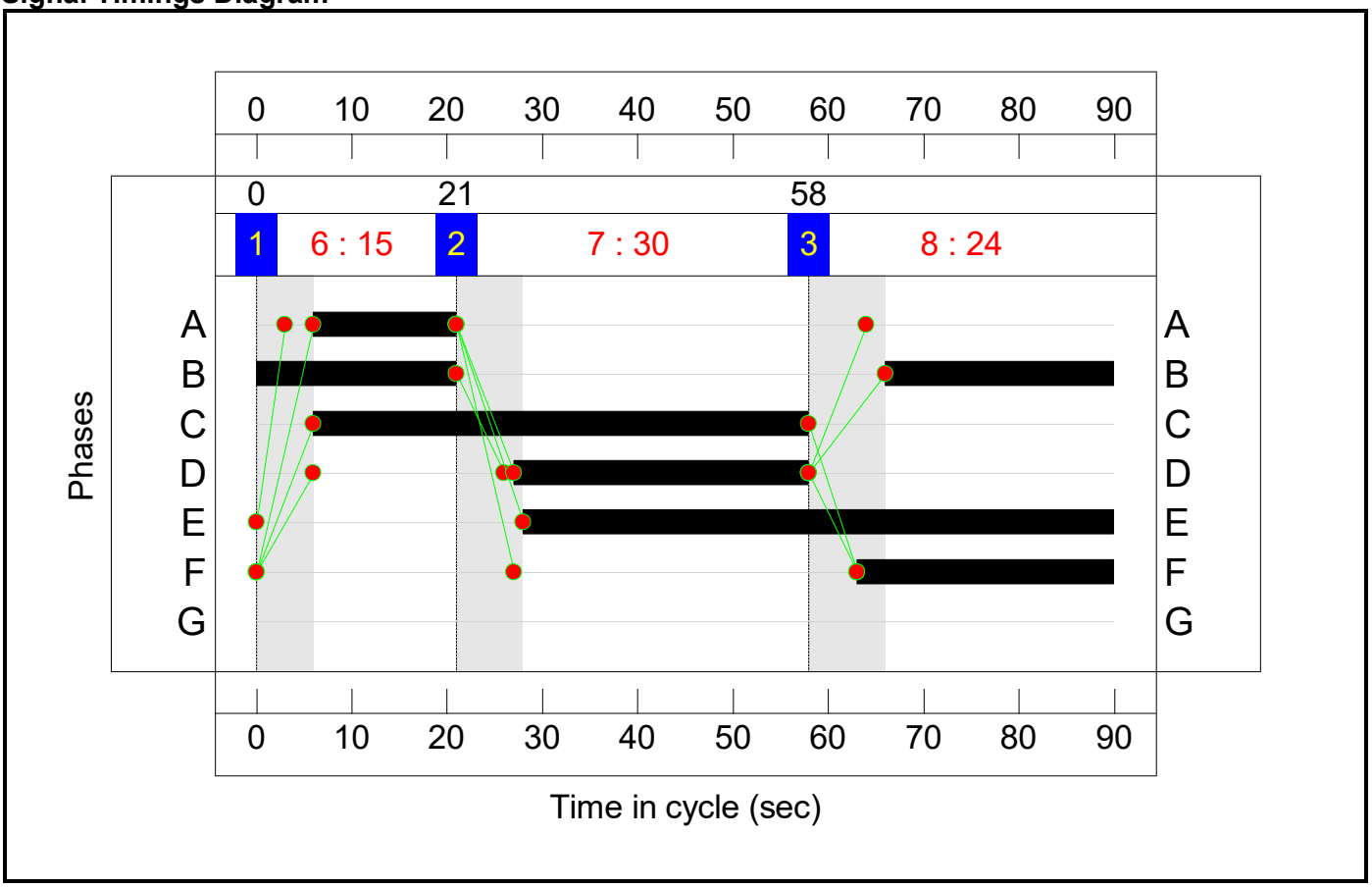
Stage Sequence Diagram



Stage Timings

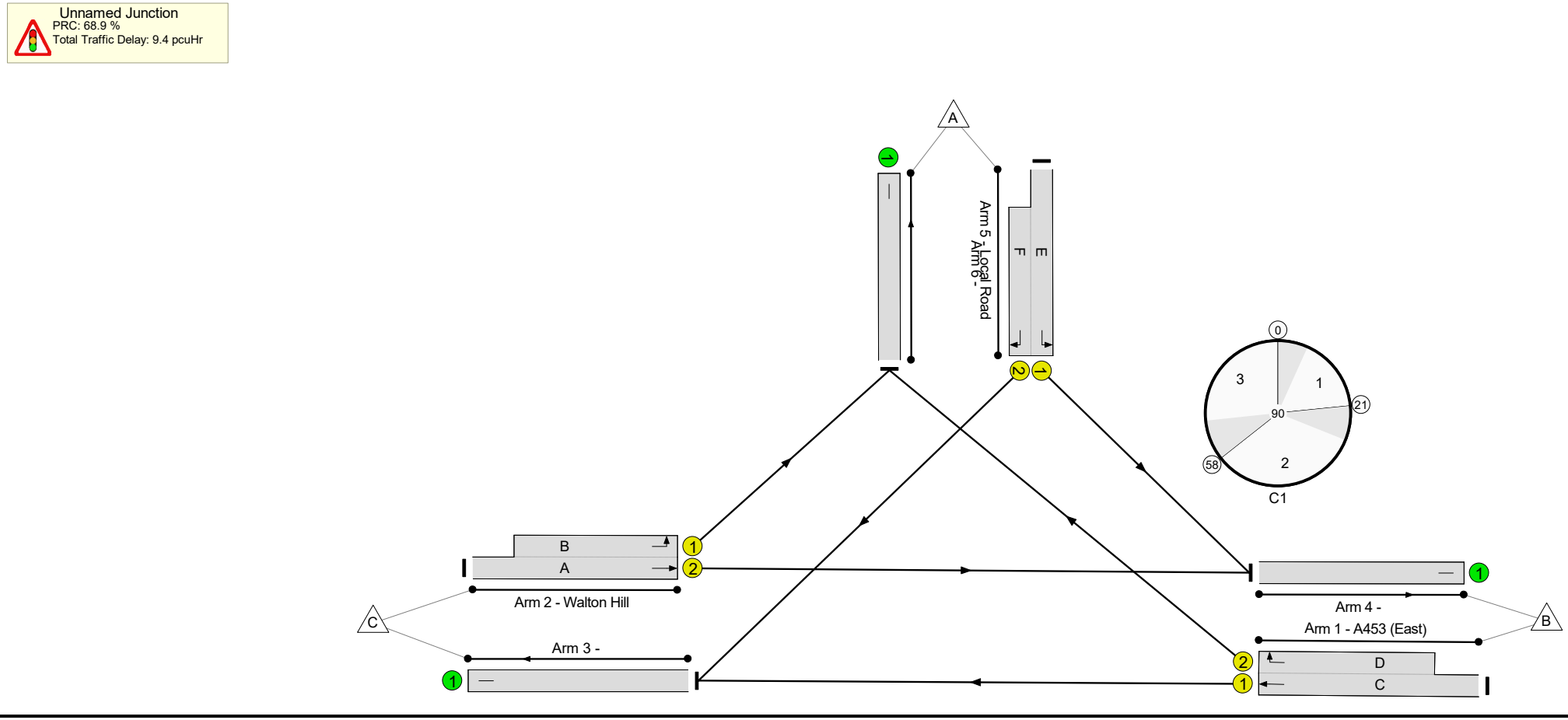
Stage	1	2	3
Duration	15	30	24
Change Point	0	21	58

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**53.3%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**53.3%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	52:31	-	631	1965:1828	546+650	52.8 : 52.8%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	15:45	-	414	2105:1828	374+454	50.0 : 50.0%
3/1		U	N/A	N/A	-		-	-	-	577	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	415	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	62:27	-	517	1786:1828	428+542	53.3 : 53.3%
6/1		U	N/A	N/A	-		-	-	-	570	Inf	Inf	0.0%

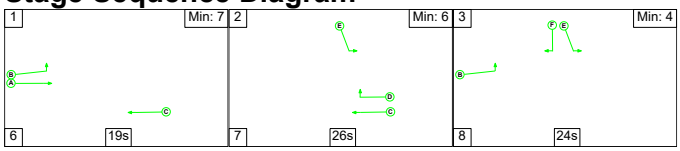
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	**-**	**-**	**0**	**0**	**0**	**7.7**	**1.6**	**0.0**	**9.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**7.7**	**1.6**	**0.0**	**9.4**	**-**	**-**	**-**	**-**
1/1+1/2	631	631	-	-	-	2.9	0.6	-	3.5	19.8	6.8	0.6	7.3
2/2+2/1	414	414	-	-	-	2.5	0.5	-	3.0	26.2	4.2	0.5	4.7
3/1	577	577	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	517	517	-	-	-	2.3	0.6	-	2.9	20.2	5.9	0.6	6.4
6/1	570	570	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 68.9 Total Delay for Signalled Lanes (pcuHr): 9.37 Cycle Time (s): 90
PRC Over All Lanes (%): 68.9 Total Delay Over All Lanes(pcuHr): 9.37

Full Input Data And Results

Scenario 3: '2028 Forecast Year Without Development (AM)' (FG3: '2028 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

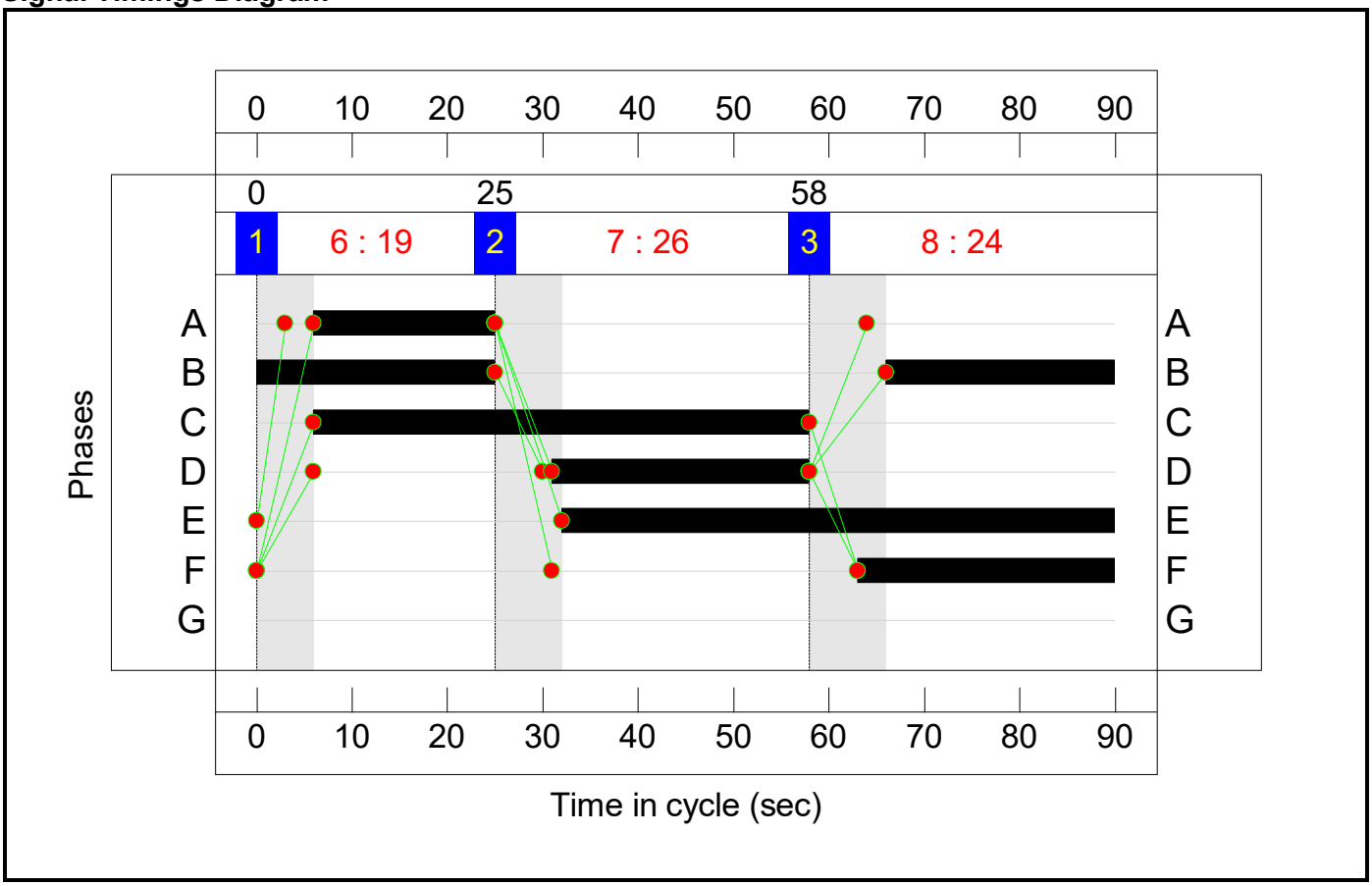
Stage Sequence Diagram



Stage Timings

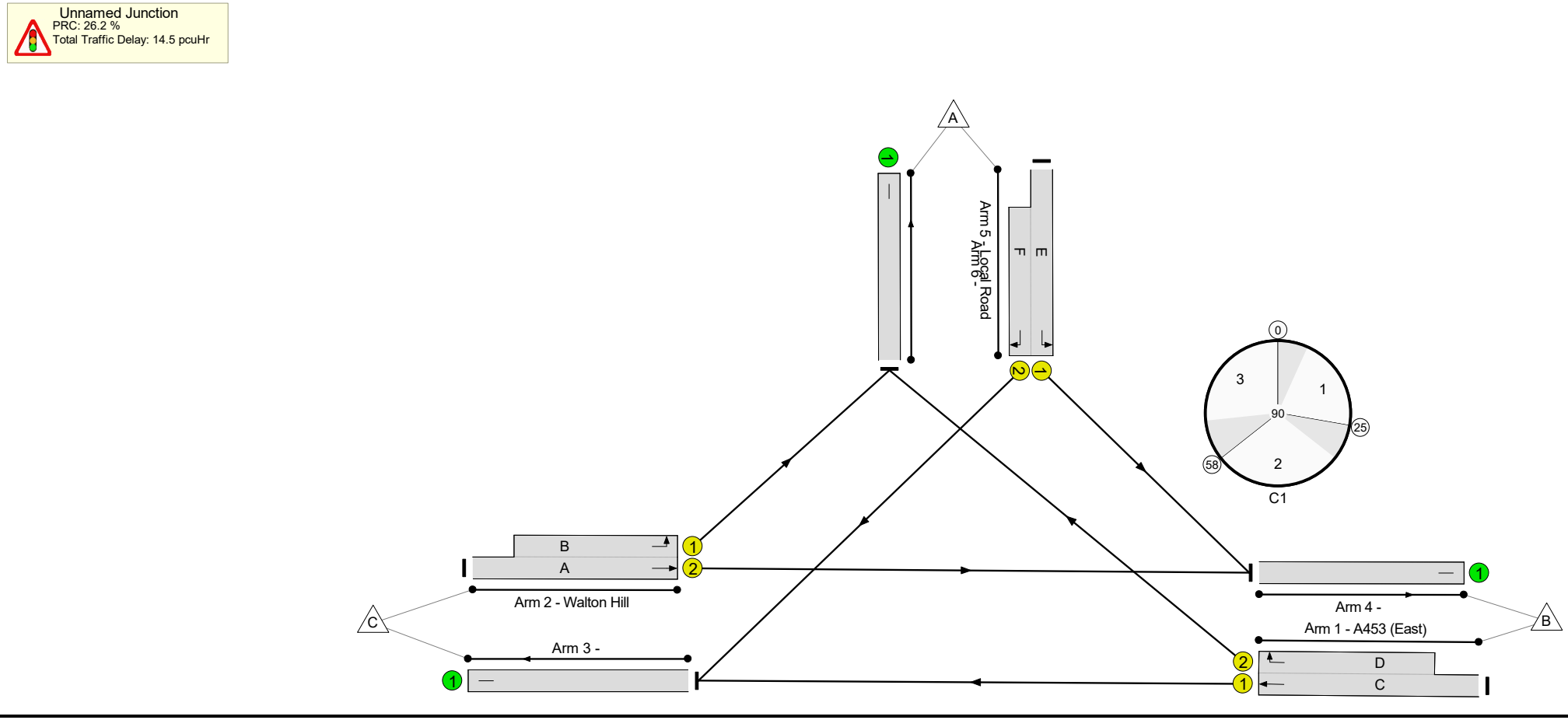
Stage	1	2	3
Duration	19	26	24
Change Point	0	25	58

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.3%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	52:27	-	585	1965:1828	390+569	61.0 : 61.0%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	19:49	-	644	2105:1828	468+459	69.5 : 69.5%
3/1		U	N/A	N/A	-		-	-	-	611	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	999	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	58:27	-	1047	1786:1828	945+523	71.3 : 71.3%
6/1		U	N/A	N/A	-		-	-	-	666	Inf	Inf	0.0%

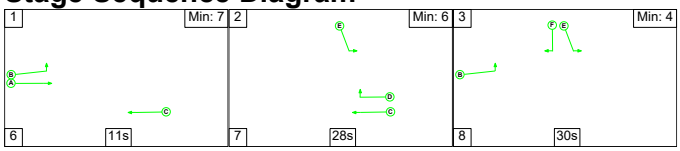
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**11.4**	**3.1**	**0.0**	**14.5**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**11.4**	**3.1**	**0.0**	**14.5**	-	-	-	-
1/1+1/2	585	585	-	-	-	3.1	0.8	-	3.9	24.0	7.3	0.8	8.1
2/2+2/1	644	644	-	-	-	3.9	1.1	-	5.0	27.9	7.4	1.1	8.5
3/1	611	611	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	999	999	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1047	1047	-	-	-	4.4	1.2	-	5.6	19.3	9.2	1.2	10.4
6/1	666	666	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 26.2 Total Delay for Signalled Lanes (pcuHr): 14.51 Cycle Time (s): 90
PRC Over All Lanes (%): 26.2 Total Delay Over All Lanes(pcuHr): 14.51

Full Input Data And Results

Scenario 4: '2028 Forecast Year Without Development (PM)' (FG4: '2028 Forecast Year Without Development (PM)', Plan 1: 'Network Control Plan 1')

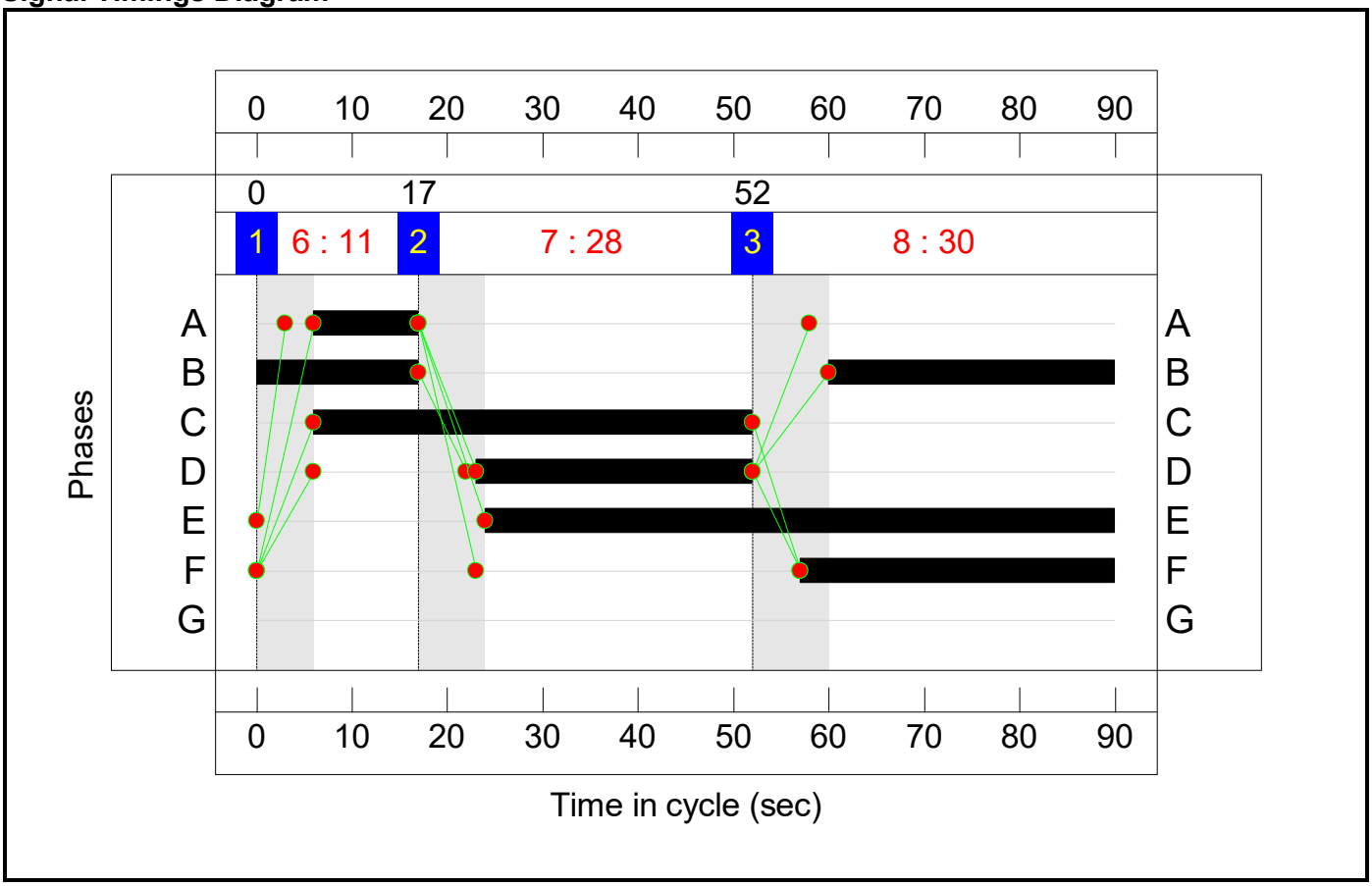
Stage Sequence Diagram



Stage Timings

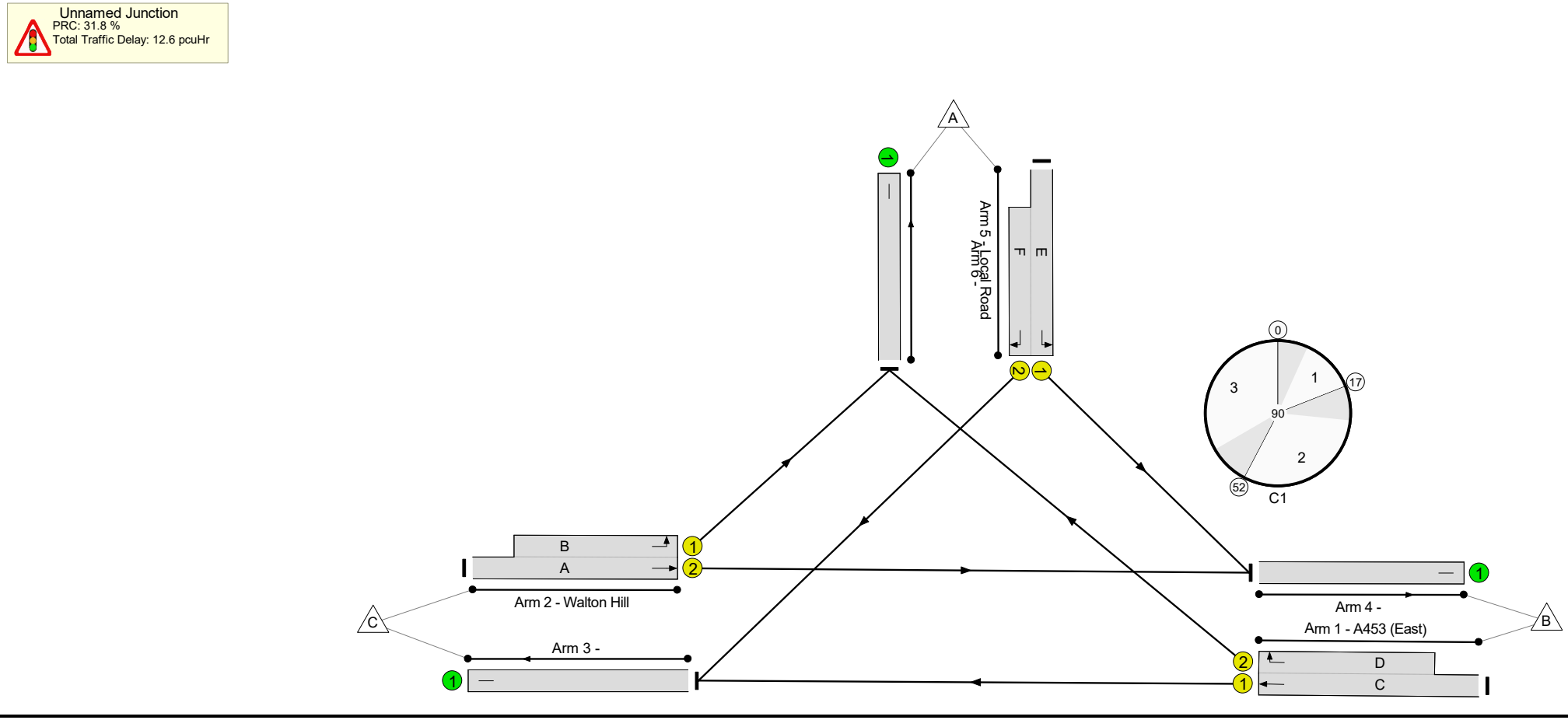
Stage	1	2	3
Duration	11	28	30
Change Point	0	17	52

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.3%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	46:29	-	804	1965:1828	597+609	66.6 : 66.6%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	11:47	-	380	2105:1828	281+322	63.1 : 63.1%
3/1		U	N/A	N/A	-		-	-	-	817	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	480	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	66:33	-	722	1786:1828	444+613	68.3 : 68.3%
6/1		U	N/A	N/A	-		-	-	-	609	Inf	Inf	0.0%

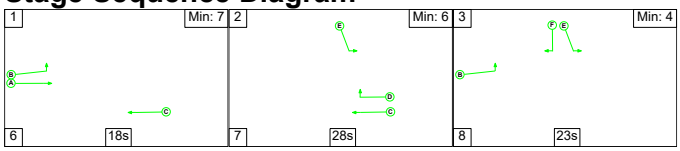
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**9.7**	**2.9**	**0.0**	**12.6**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**9.7**	**2.9**	**0.0**	**12.6**	-	-	-	-
1/1+1/2	804	804	-	-	-	4.3	1.0	-	5.3	23.8	8.7	1.0	9.7
2/2+2/1	380	380	-	-	-	2.4	0.8	-	3.3	31.1	4.2	0.8	5.0
3/1	817	817	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	480	480	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	722	722	-	-	-	2.9	1.1	-	4.0	19.9	8.4	1.1	9.5
6/1	609	609	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 31.8 Total Delay for Signalled Lanes (pcuHr): 12.60 Cycle Time (s): 90
PRC Over All Lanes (%): 31.8 Total Delay Over All Lanes(pcuHr): 12.60

Full Input Data And Results

Scenario 5: '2028 Forecast Year With Development (AM)' (FG5: '2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

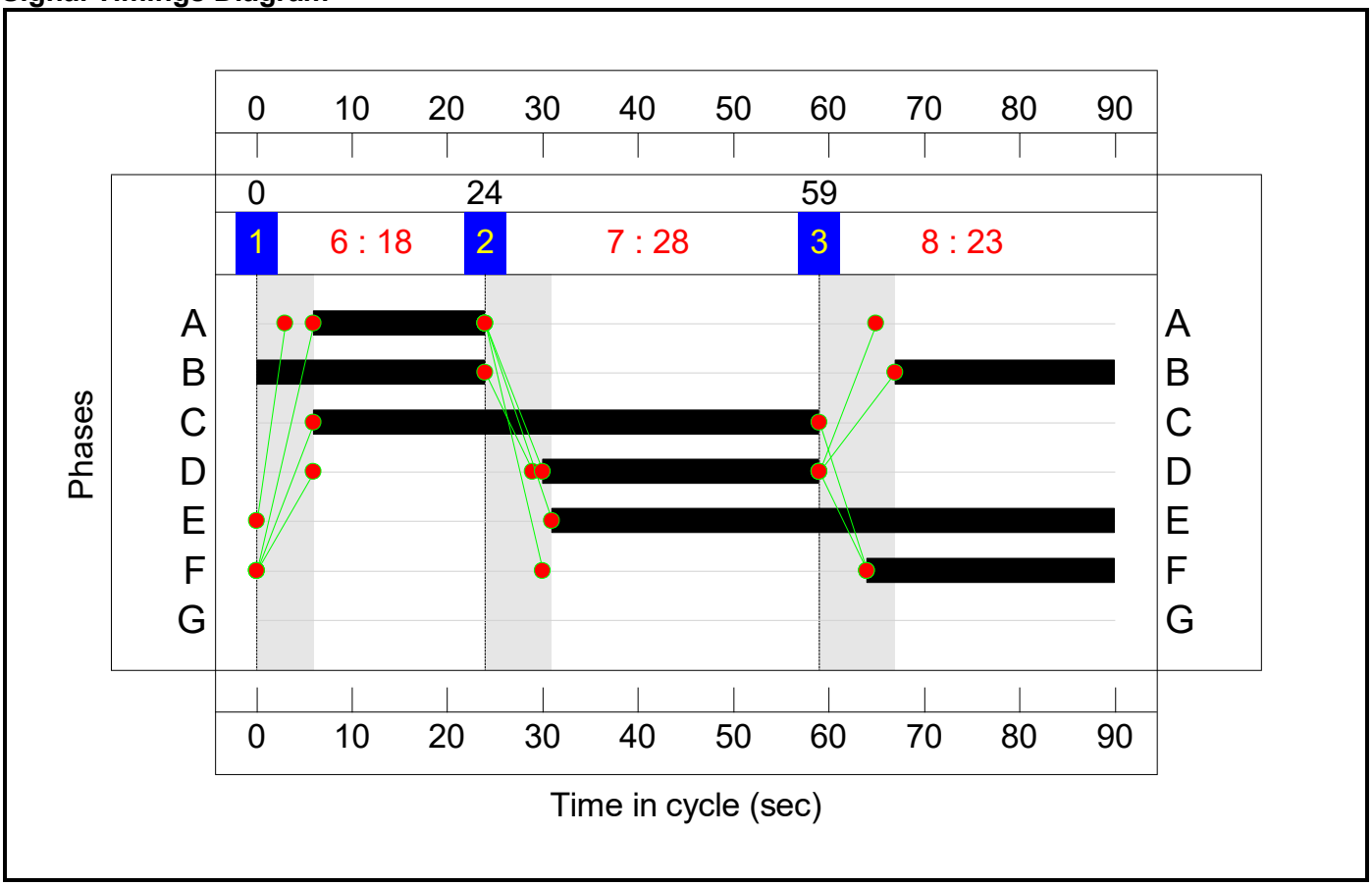
Stage Sequence Diagram



Stage Timings

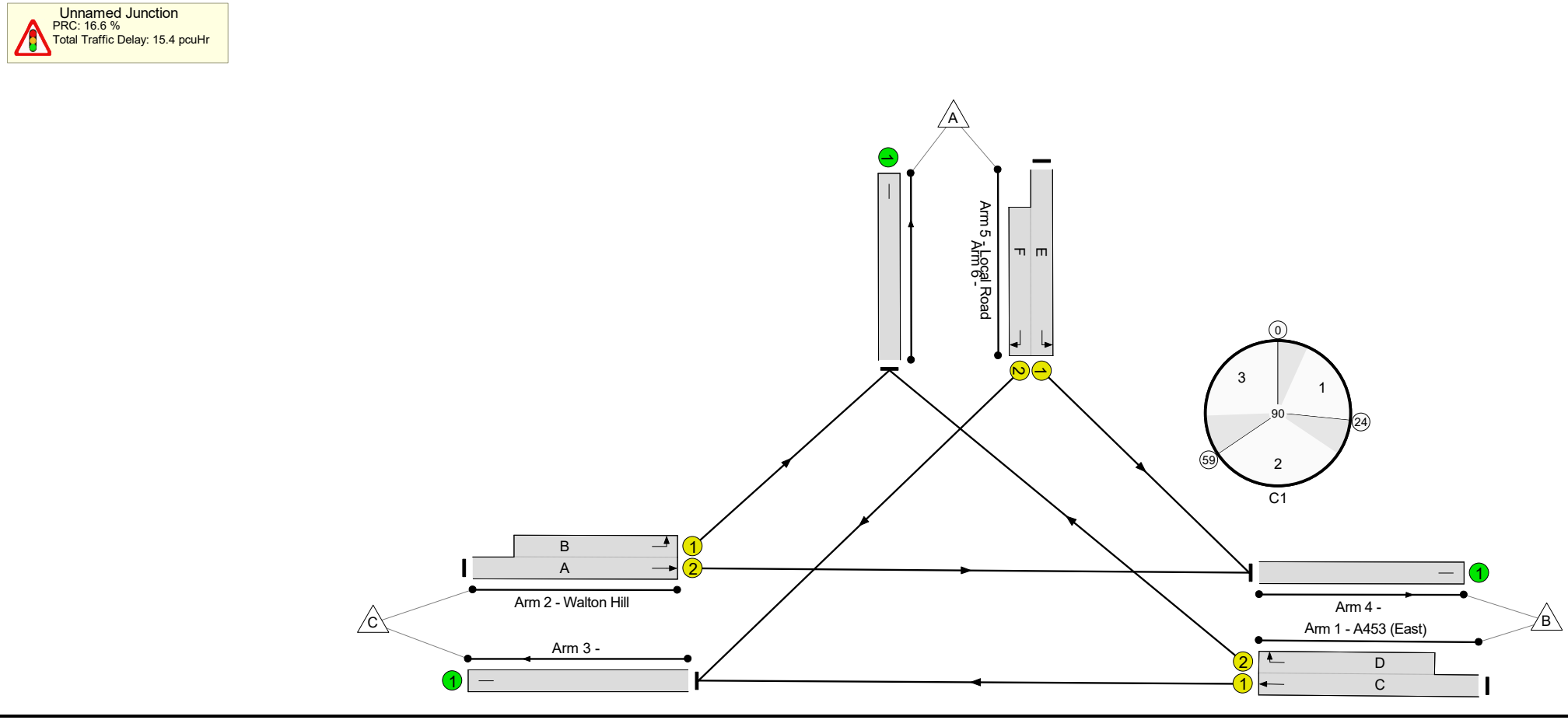
Stage	1	2	3
Duration	18	28	23
Change Point	0	24	59

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.2%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.2%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	53:29	-	546	1965:1828	378+609	55.3 : 55.3%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	18:47	-	664	2105:1828	444+416	77.2 : 77.2%
3/1		U	N/A	N/A	-		-	-	-	564	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	1092	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	59:26	-	1104	1786:1828	981+465	76.3 : 76.3%
6/1		U	N/A	N/A	-		-	-	-	658	Inf	Inf	0.0%

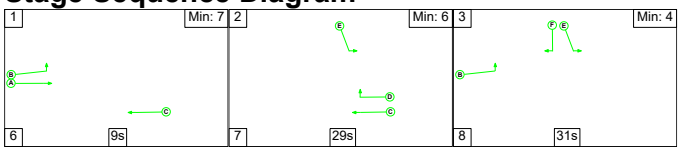
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	**-**	**-**	**0**	**0**	**0**	**11.5**	**3.9**	**0.0**	**15.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**11.5**	**3.9**	**0.0**	**15.4**	**-**	**-**	**-**	**-**
1/1+1/2	546	546	-	-	-	2.8	0.6	-	3.4	22.3	6.8	0.6	7.5
2/2+2/1	664	664	-	-	-	4.2	1.7	-	5.9	32.1	8.0	1.7	9.7
3/1	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1092	1092	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1104	1104	-	-	-	4.5	1.6	-	6.1	19.9	10.6	1.6	12.2
6/1	658	658	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 16.6 Total Delay for Signalled Lanes (pcuHr): 15.38 Cycle Time (s): 90
PRC Over All Lanes (%): 16.6 Total Delay Over All Lanes(pcuHr): 15.38

Full Input Data And Results

Scenario 6: '2028 Forecast Year With Development (PM)' (FG6: '2028 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

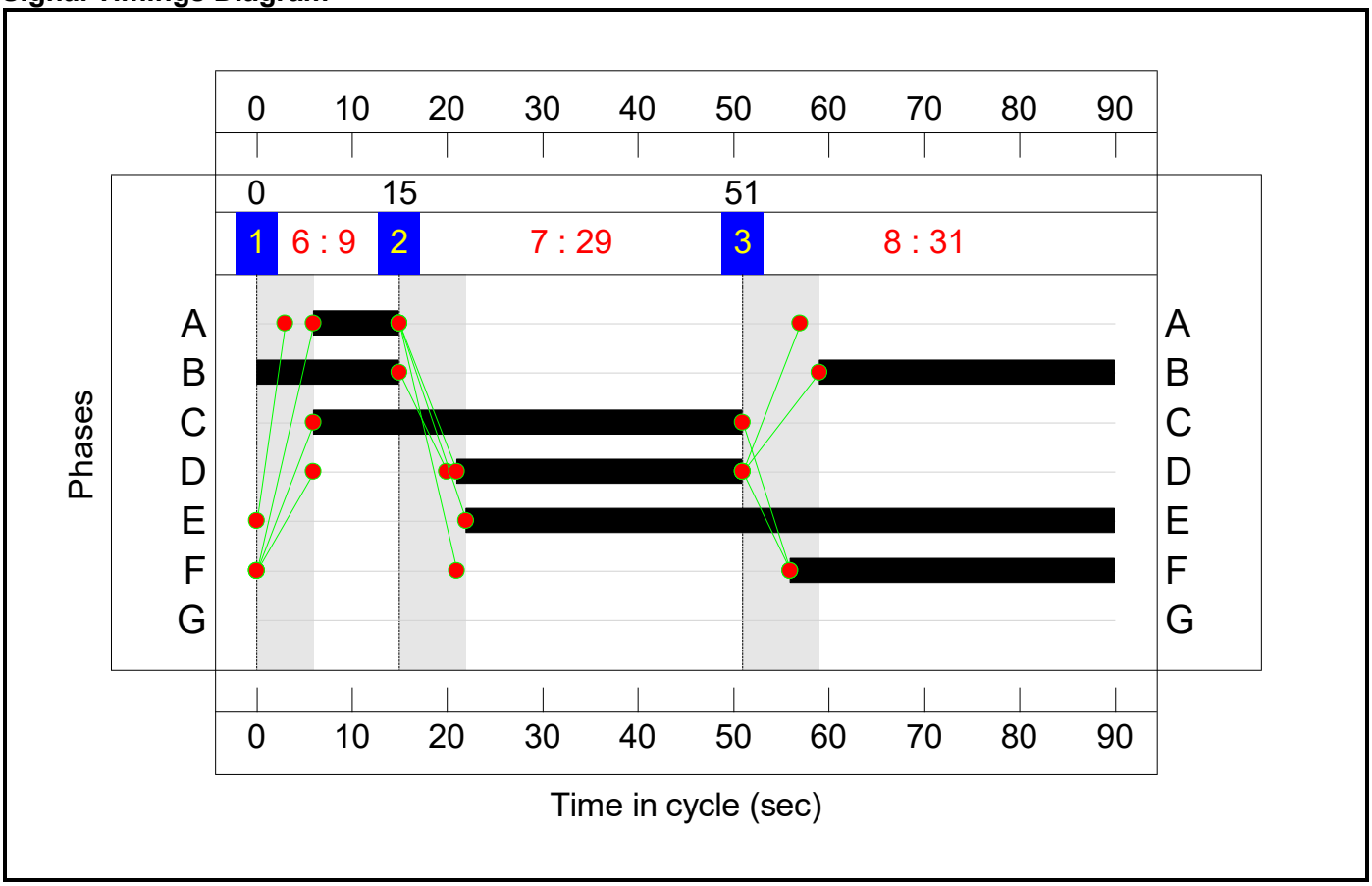
Stage Sequence Diagram



Stage Timings

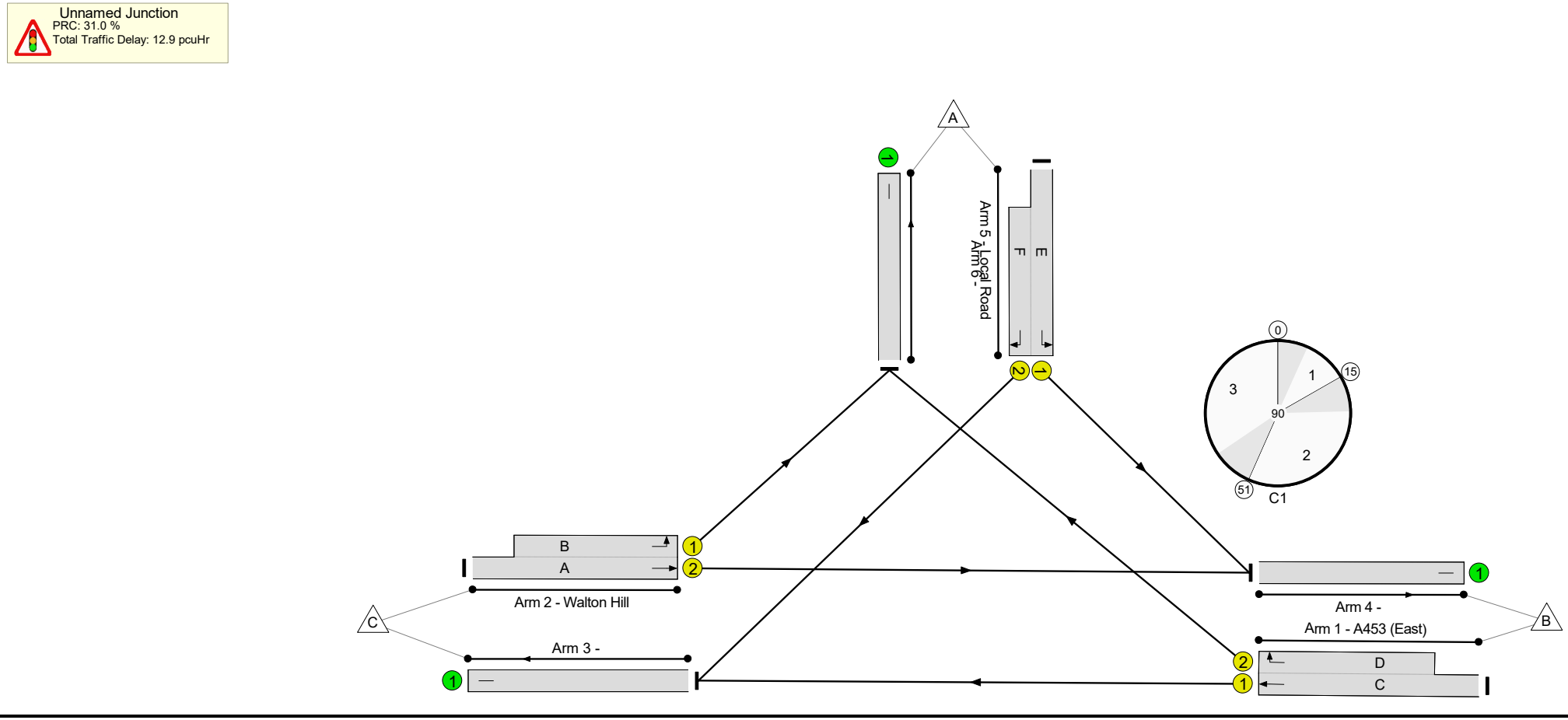
Stage	1	2	3
Duration	9	29	31
Change Point	0	15	51

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.7%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	45:30	-	837	1965:1828	610+630	67.5 : 67.5%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	9:46	-	349	2105:1828	234+283	67.6 : 67.6%
3/1		U	N/A	N/A	-		-	-	-	844	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	446	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	68:34	-	720	1786:1828	419+629	68.7 : 68.7%
6/1		U	N/A	N/A	-		-	-	-	616	Inf	Inf	0.0%

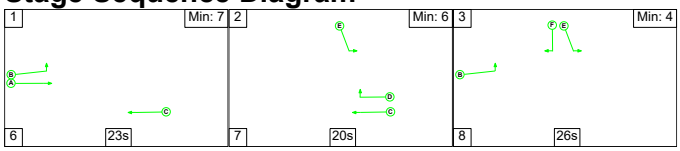
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**9.7**	**3.2**	**0.0**	**12.9**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**9.7**	**3.2**	**0.0**	**12.9**	-	-	-	-
1/1+1/2	837	837	-	-	-	4.5	1.0	-	5.6	23.9	9.0	1.0	10.0
2/2+2/1	349	349	-	-	-	2.3	1.0	-	3.3	34.3	3.8	1.0	4.8
3/1	844	844	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	446	446	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	720	720	-	-	-	2.9	1.1	-	4.0	19.8	8.6	1.1	9.7
6/1	616	616	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 31.0 Total Delay for Signalled Lanes (pcuHr): 12.86 Cycle Time (s): 90
PRC Over All Lanes (%): 31.0 Total Delay Over All Lanes(pcuHr): 12.86

Full Input Data And Results

Scenario 7: '2038 Forecast Year Without Development (AM)' (FG7: '2038 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

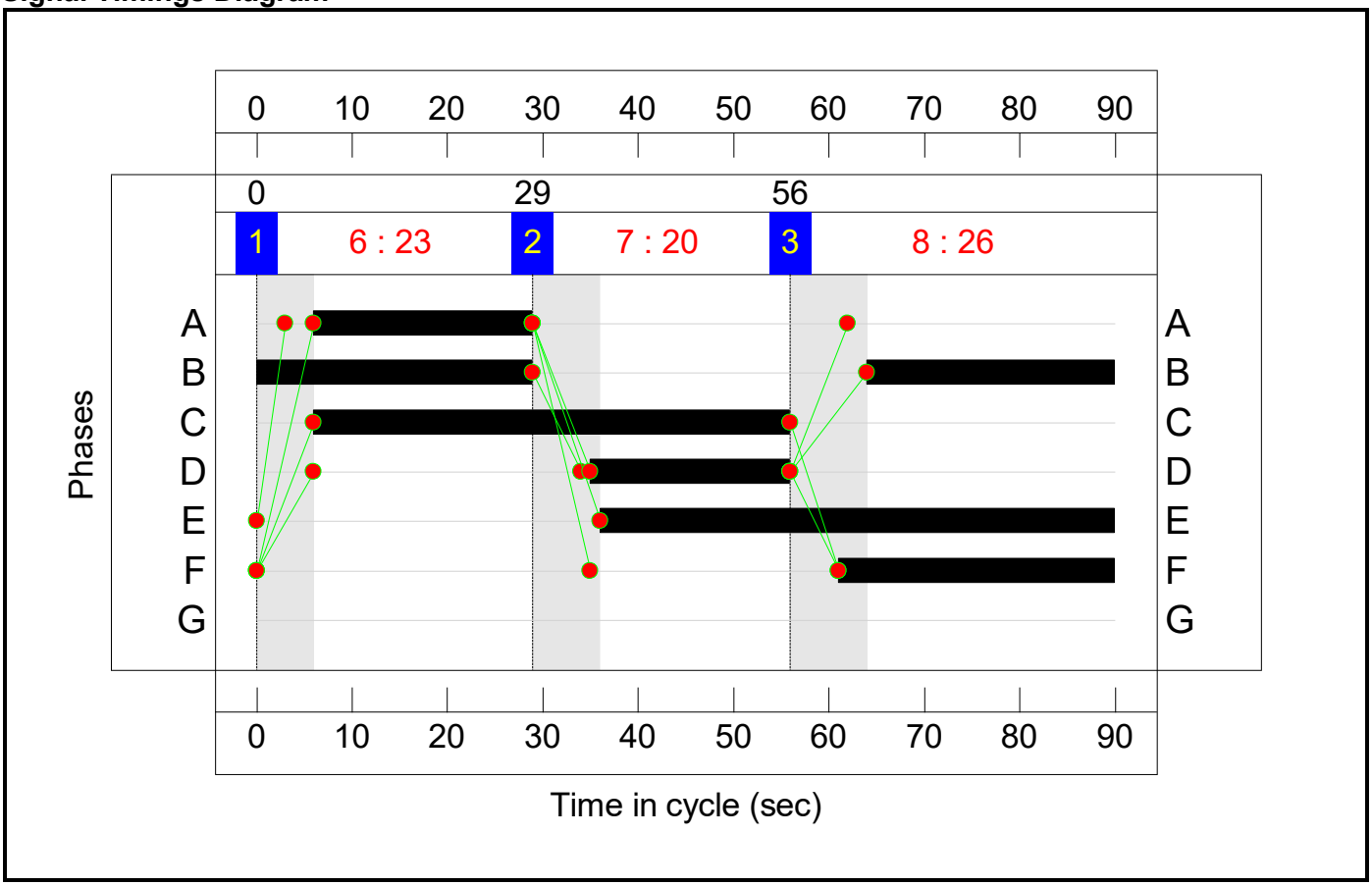
Stage Sequence Diagram



Stage Timings

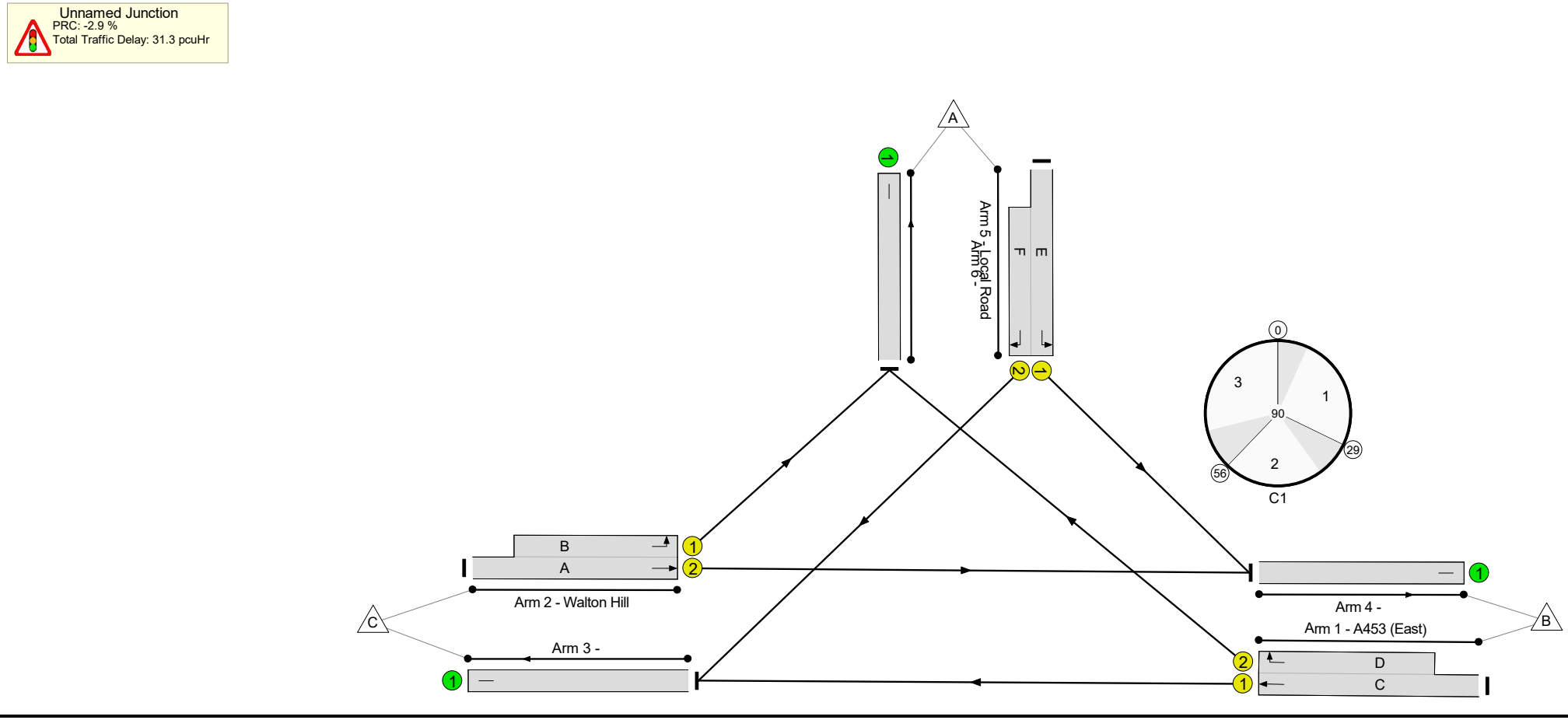
Stage	1	2	3
Duration	23	20	26
Change Point	0	29	56

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.6%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	50:21	-	707	1965:1828	333+447	90.6 : 90.6%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	23:55	-	1186	2105:1828	561+744	90.9 : 90.9%
3/1		U	N/A	N/A	-		-	-	-	817	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	1134	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	54:29	-	1139	1786:1828	674+556	92.6 : 92.6%
6/1		U	N/A	N/A	-		-	-	-	1081	Inf	Inf	0.0%

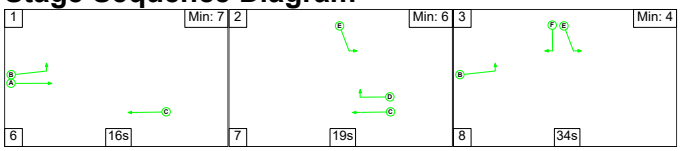
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**16.8**	**14.5**	**0.0**	**31.3**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**16.8**	**14.5**	**0.0**	**31.3**	-	-	-	-
1/1+1/2	707	707	-	-	-	4.6	4.3	-	8.9	45.2	9.8	4.3	14.1
2/2+2/1	1186	1186	-	-	-	6.4	4.6	-	11.0	33.5	12.3	4.6	16.9
3/1	817	817	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1134	1134	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1139	1139	-	-	-	5.8	5.6	-	11.4	35.9	11.9	5.6	17.4
6/1	1081	1081	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -2.9 Total Delay for Signalled Lanes (pcuHr): 31.29 Cycle Time (s): 90
PRC Over All Lanes (%): -2.9 Total Delay Over All Lanes(pcuHr): 31.29

Full Input Data And Results

Scenario 8: '2038 Forecast Year Without Development (PM)' (FG8: '2038 Forecast Year Without Development (PM)', Plan 1: 'Network Control Plan 1')

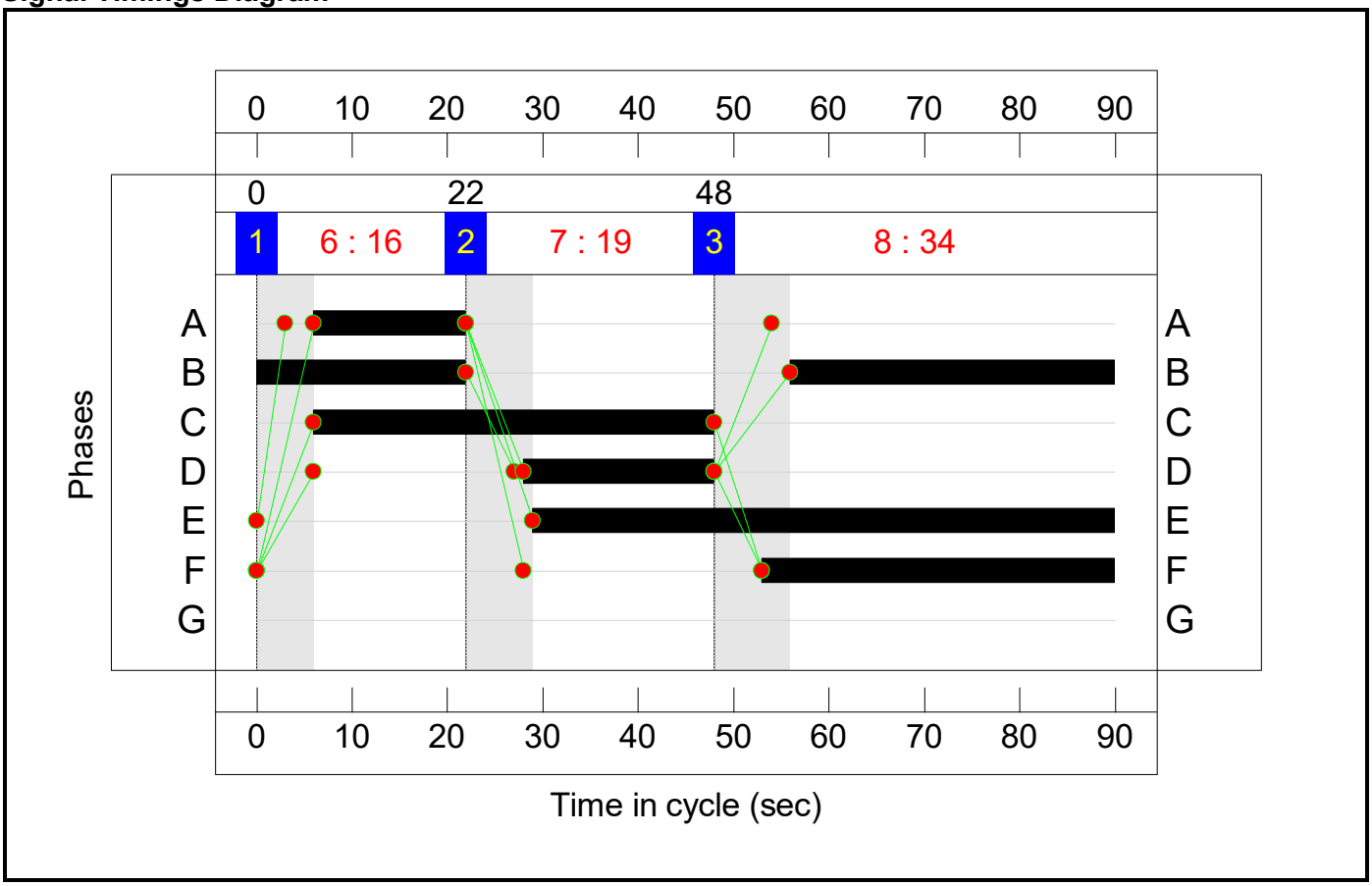
Stage Sequence Diagram



Stage Timings

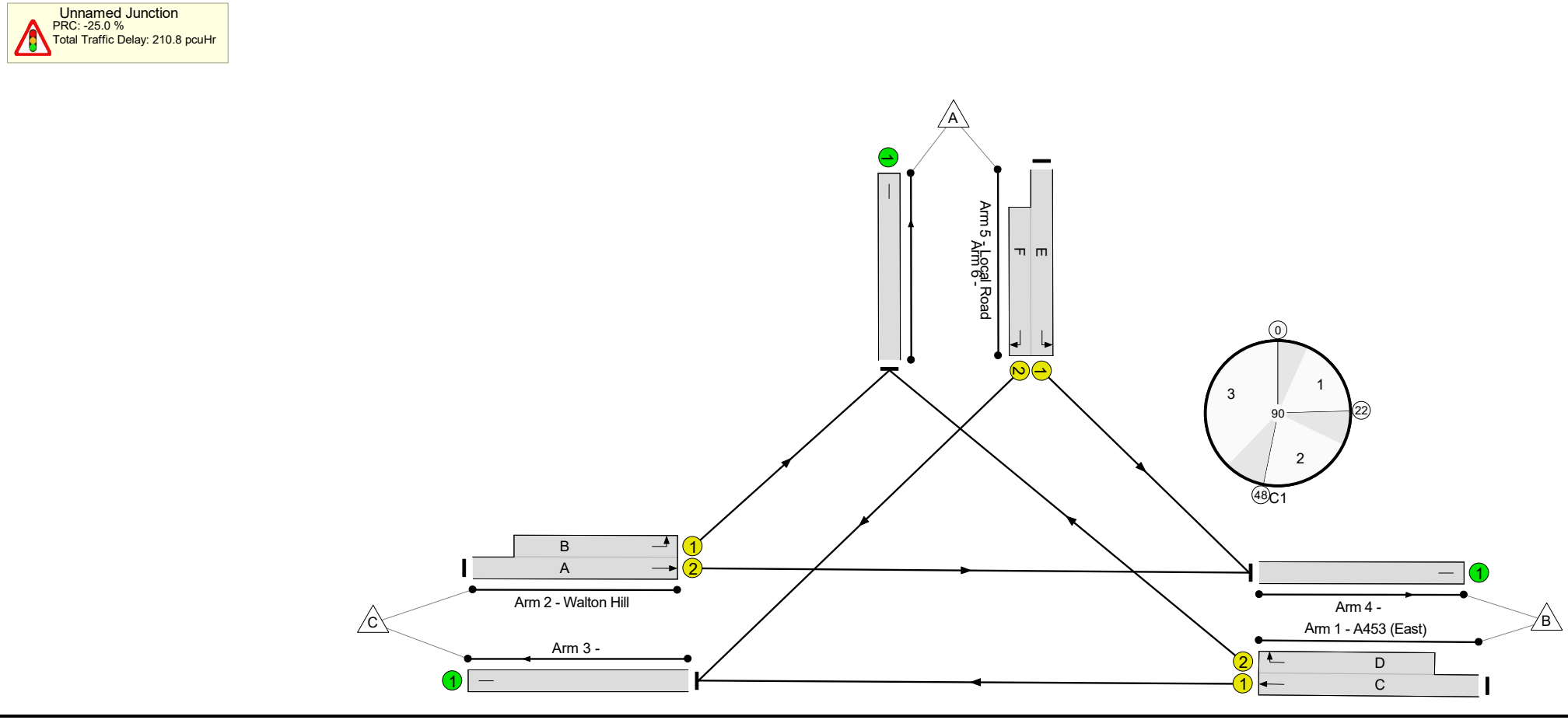
Stage	1	2	3
Duration	16	19	34
Change Point	0	22	48

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**112.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**112.5%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	42:20	-	938	1965:1828	407+427	112.5 : 112.5%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	16:56	-	1045	2105:1828	398+534	112.2 : 112.2%
3/1		U	N/A	N/A	-		-	-	-	1207	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	897	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	61:37	-	1200	1786:1828	404+671	111.7 : 111.7%
6/1		U	N/A	N/A	-		-	-	-	1079	Inf	Inf	0.0%

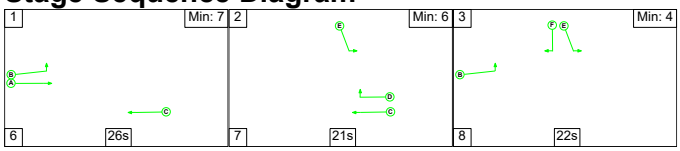
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**26.3**	**184.5**	**0.0**	**210.8**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**26.3**	**184.5**	**0.0**	**210.8**	-	-	-	-
1/1+1/2	938	885	-	-	-	8.7	56.4	-	65.1	249.9	13.3	56.4	69.7
2/2+2/1	1045	997	-	-	-	8.2	61.0	-	69.2	238.4	12.4	61.0	73.3
3/1	1129	1129	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	802	802	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1200	1075	-	-	-	9.4	67.1	-	76.5	229.5	26.7	67.1	93.8
6/1	1026	1026	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -25.0 PRC Over All Lanes (%): -25.0 Total Delay for Signalled Lanes (pcuHr): 210.81 Total Delay Over All Lanes(pcuHr): 210.81 Cycle Time (s): 90

Full Input Data And Results

Scenario 9: '2038 Forecast Year With Development (AM)' (FG9: '2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

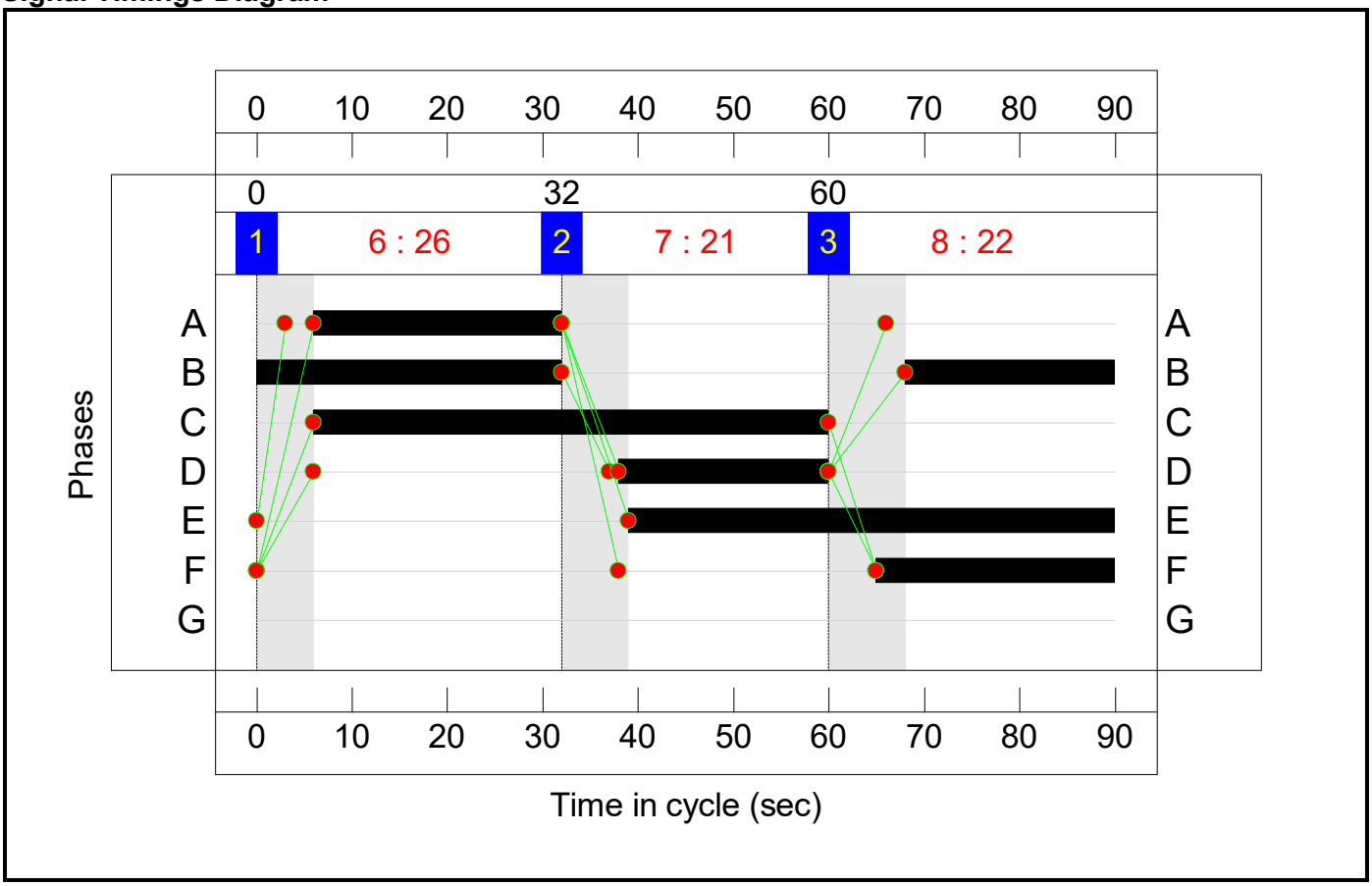
Stage Sequence Diagram



Stage Timings

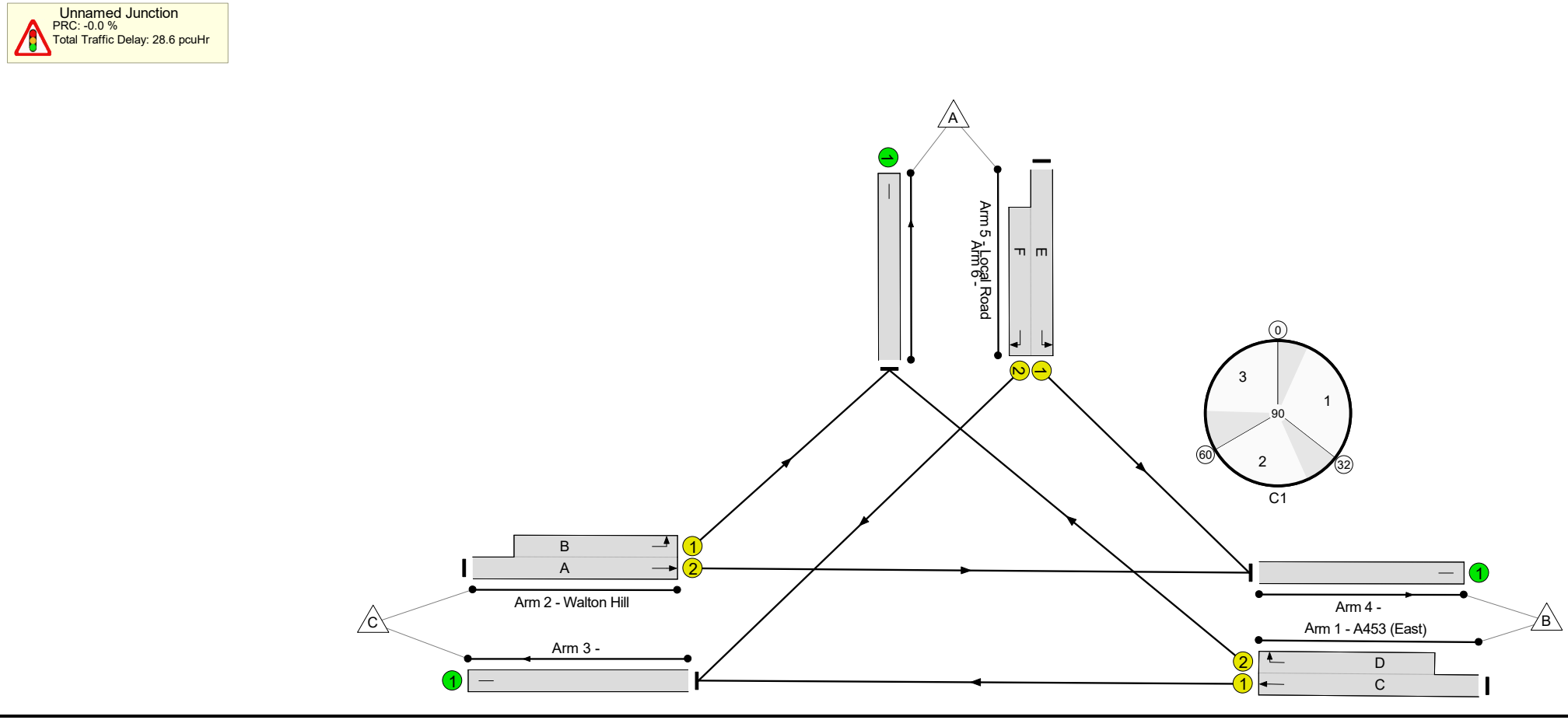
Stage	1	2	3
Duration	26	21	22
Change Point	0	32	60

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**90.0%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**90.0%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	54:22	-	679	1965:1828	305+467	88.0 : 88.0%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	26:54	-	1224	2105:1828	595+777	89.2 : 89.2%
3/1		U	N/A	N/A	-		-	-	-	736	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	1190	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	51:25	-	1127	1786:1828	732+520	90.0 : 90.0%
6/1		U	N/A	N/A	-		-	-	-	1104	Inf	Inf	0.0%

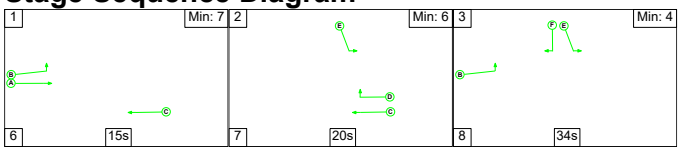
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**17.0**	**11.5**	**0.0**	**28.6**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**17.0**	**11.5**	**0.0**	**28.6**	-	-	-	-
1/1+1/2	679	679	-	-	-	4.3	3.4	-	7.7	40.7	9.8	3.4	13.2
2/2+2/1	1224	1224	-	-	-	6.5	3.9	-	10.4	30.5	12.4	3.9	16.3
3/1	736	736	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1190	1190	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1127	1127	-	-	-	6.3	4.2	-	10.5	33.6	11.2	4.2	15.4
6/1	1104	1104	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -0.0 Total Delay for Signalled Lanes (pcuHr): 28.57 Cycle Time (s): 90
PRC Over All Lanes (%): -0.0 Total Delay Over All Lanes(pcuHr): 28.57

Full Input Data And Results

Scenario 10: '2038 Forecast Year With Development (PM)' (FG10: '2038 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

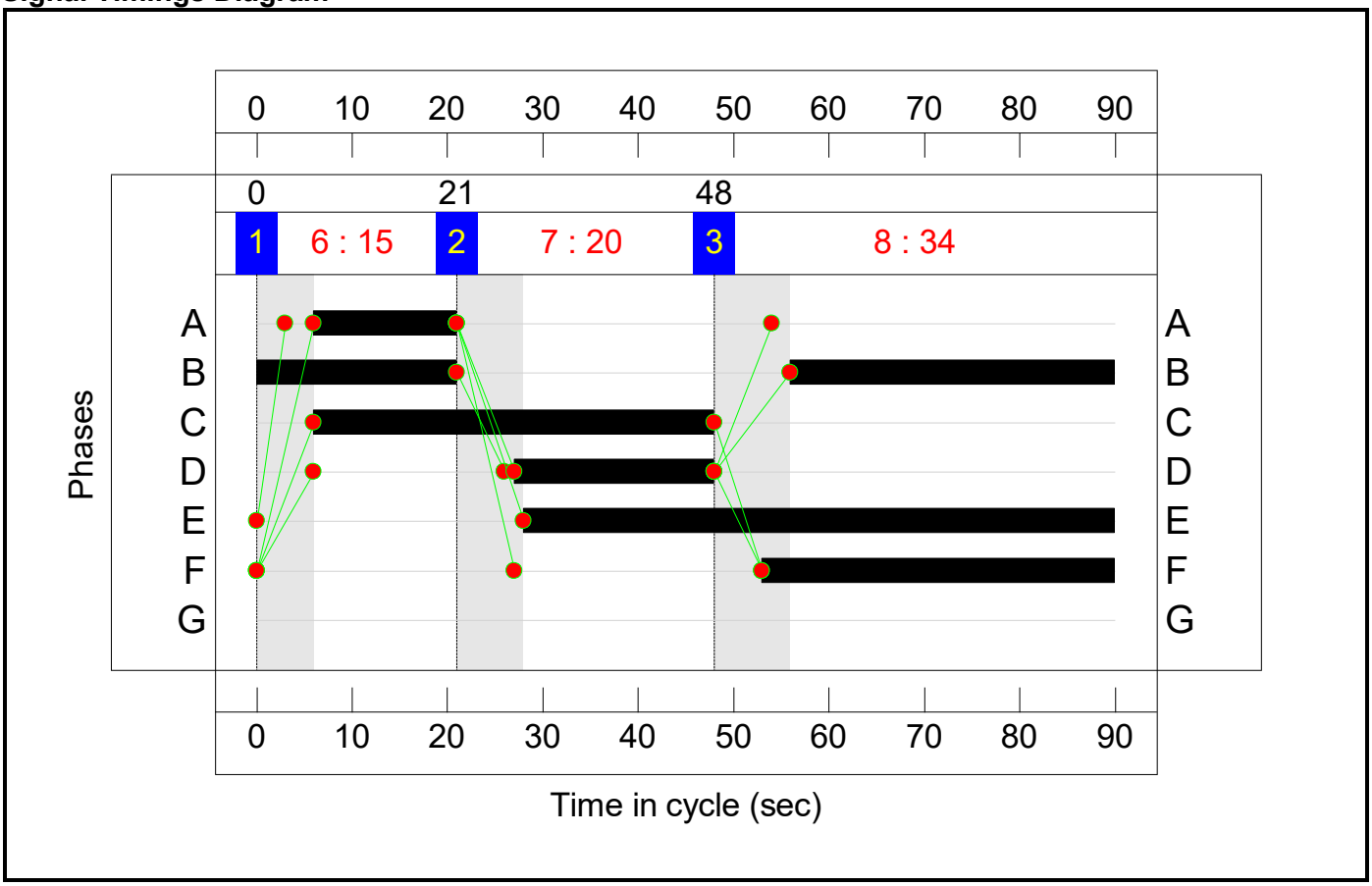
Stage Sequence Diagram



Stage Timings

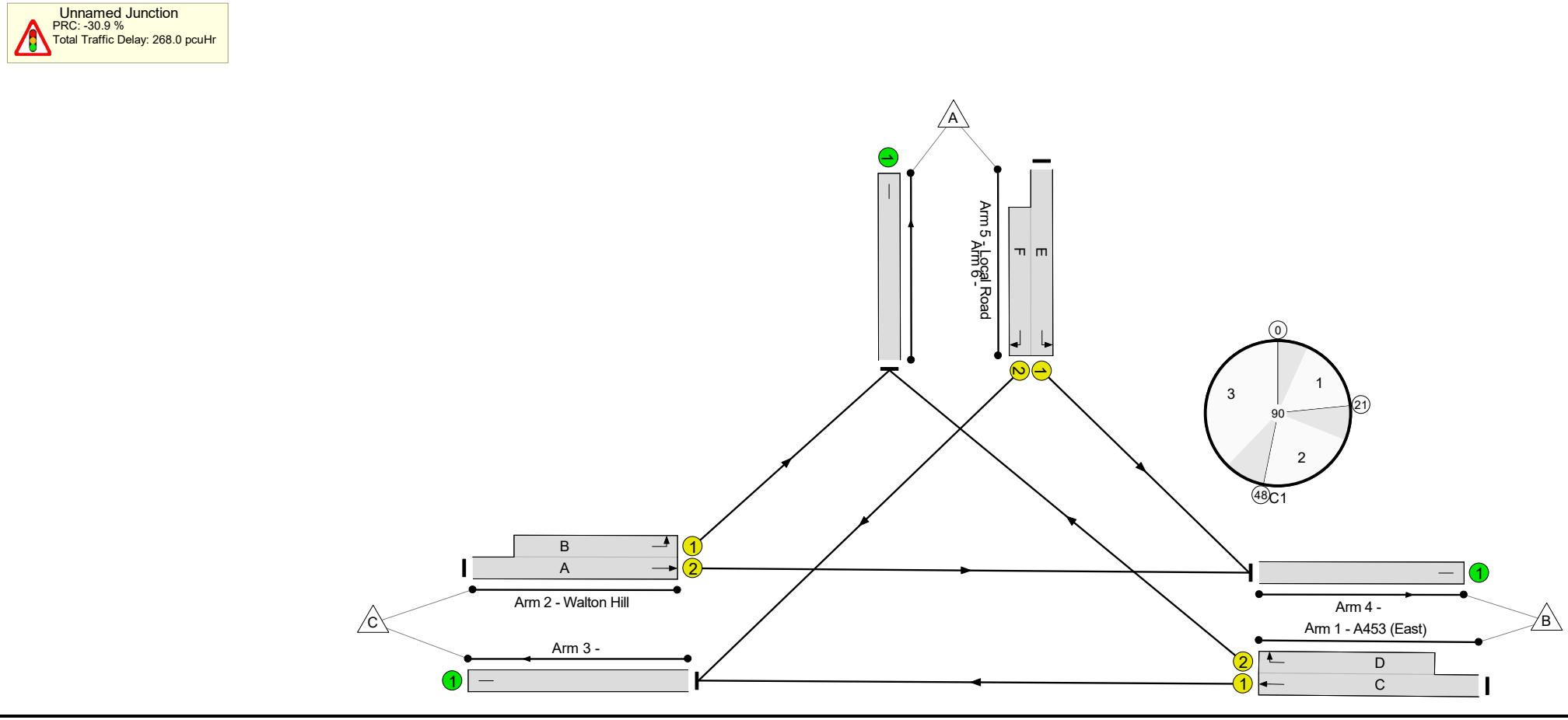
Stage	1	2	3
Duration	15	20	34
Change Point	0	21	48

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**117.8%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**117.8%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	42:21	-	1014	1965:1828	416+447	117.5 : 117.5%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	15:55	-	1024	2105:1828	374+536	112.5 : 112.5%
3/1		U	N/A	N/A	-		-	-	-	1283	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	872	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	62:37	-	1245	1786:1828	383+674	117.8 : 117.8%
6/1		U	N/A	N/A	-		-	-	-	1128	Inf	Inf	0.0%

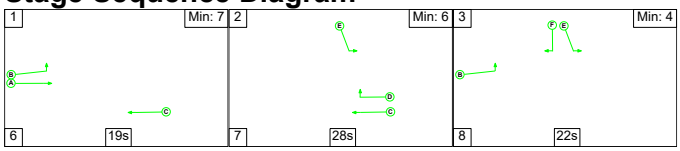
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**31.1**	**237.0**	**0.0**	**268.0**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**31.1**	**237.0**	**0.0**	**268.0**	-	-	-	-
1/1+1/2	1014	936	-	-	-	10.2	78.7	-	88.9	315.7	15.1	78.7	93.8
2/2+2/1	1024	977	-	-	-	8.1	61.1	-	69.2	243.1	11.7	61.1	72.8
3/1	1163	1163	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	757	757	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1245	1057	-	-	-	12.8	97.2	-	110.0	317.9	29.6	97.2	126.8
6/1	1050	1050	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -30.9 PRC Over All Lanes (%): -30.9 Total Delay for Signalled Lanes (pcuHr): 268.03 Total Delay Over All Lanes(pcuHr): 268.03 Cycle Time (s): 90

Full Input Data And Results

Scenario 11: '2a 2028 Forecast Year with Dev' (FG11: '2a 2028 Forecast Year with Dev (AM)', Plan 1: 'Network Control Plan 1')

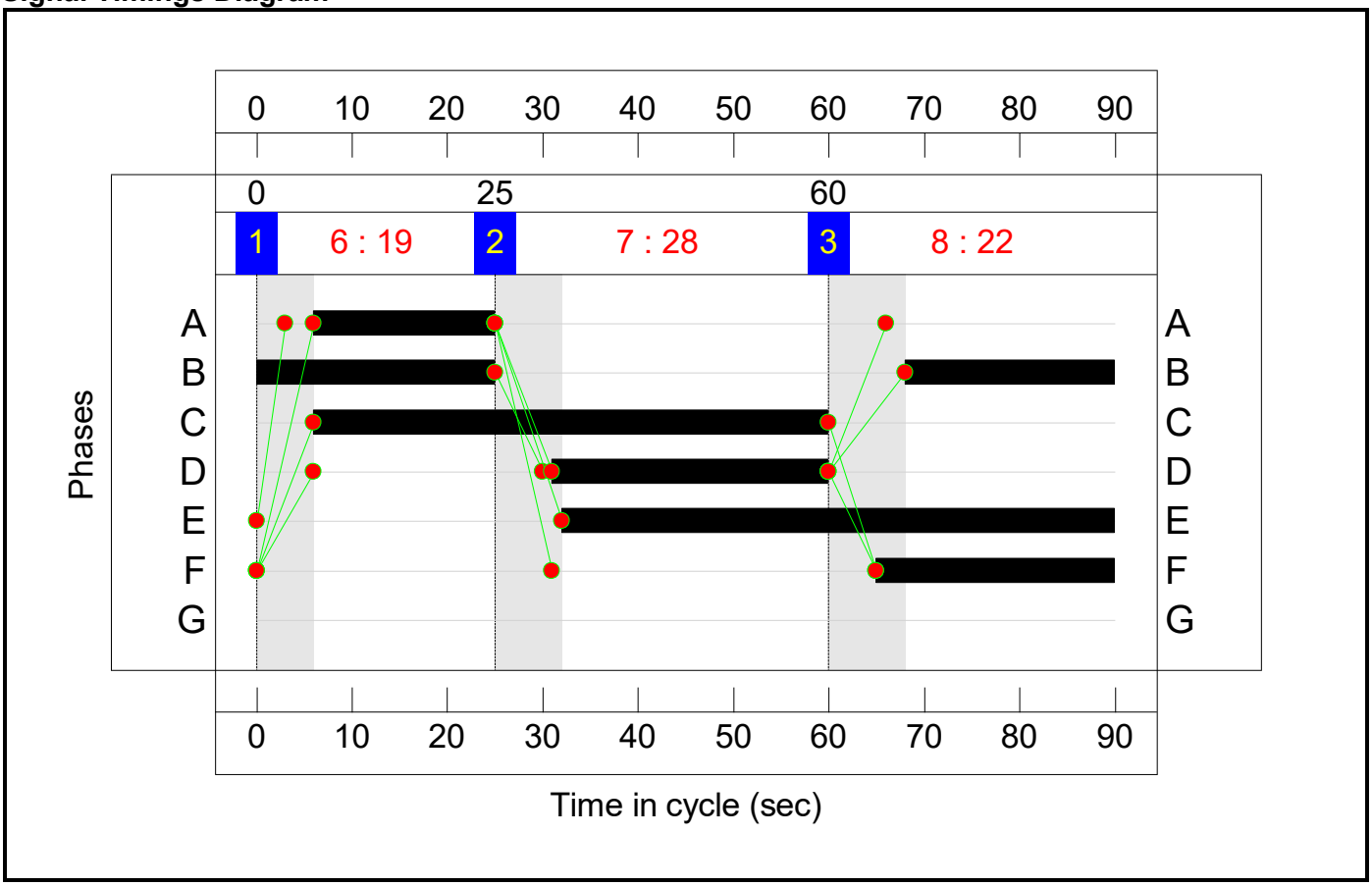
Stage Sequence Diagram



Stage Timings

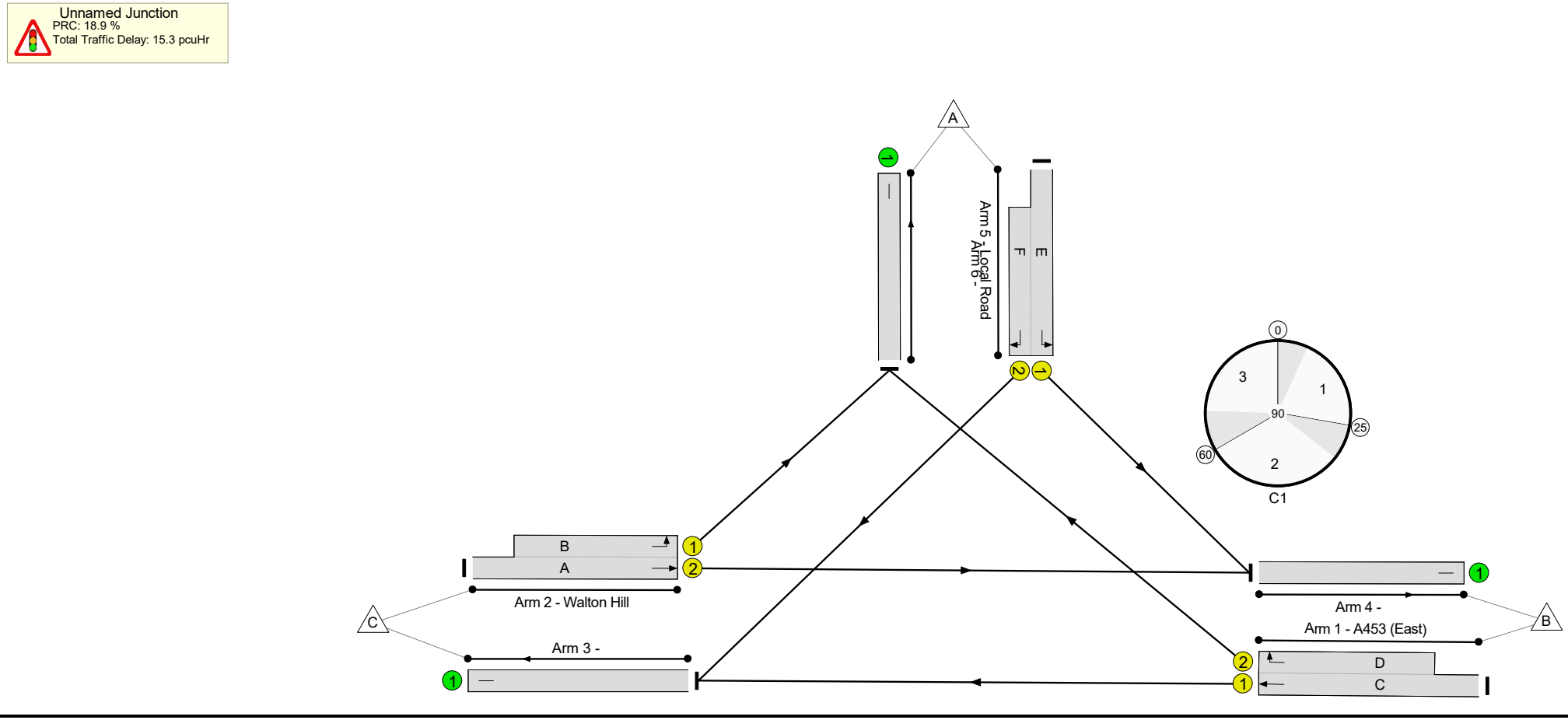
Stage	1	2	3
Duration	19	28	22
Change Point	0	25	60

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.7%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	54:29	-	559	1965:1828	423+609	54.2 : 54.2%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	19:47	-	675	2105:1828	468+424	75.7 : 75.7%
3/1		U	N/A	N/A	-		-	-	-	596	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	1070	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	58:25	-	1083	1786:1828	956+490	74.9 : 74.9%
6/1		U	N/A	N/A	-		-	-	-	651	Inf	Inf	0.0%

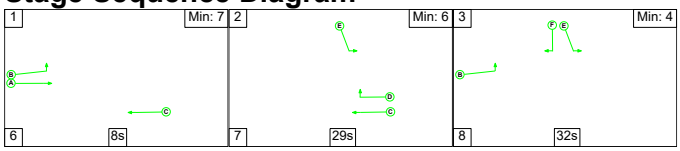
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**11.7**	**3.6**	**0.0**	**15.3**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**11.7**	**3.6**	**0.0**	**15.3**	-	-	-	-
1/1+1/2	559	559	-	-	-	2.7	0.6	-	3.3	21.4	6.7	0.6	7.3
2/2+2/1	675	675	-	-	-	4.3	1.5	-	5.8	31.0	8.3	1.5	9.8
3/1	596	596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1070	1070	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1083	1083	-	-	-	4.7	1.5	-	6.2	20.5	10.1	1.5	11.6
6/1	651	651	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 18.9 Total Delay for Signalled Lanes (pcuHr): 15.28 Cycle Time (s): 90
PRC Over All Lanes (%): 18.9 Total Delay Over All Lanes(pcuHr): 15.28

Full Input Data And Results

Scenario 12: '2a 2028 Forecast Year with Dev' (FG12: '2a 2028 Forecast Year with Dev (PM)', Plan 1: 'Network Control Plan 1')

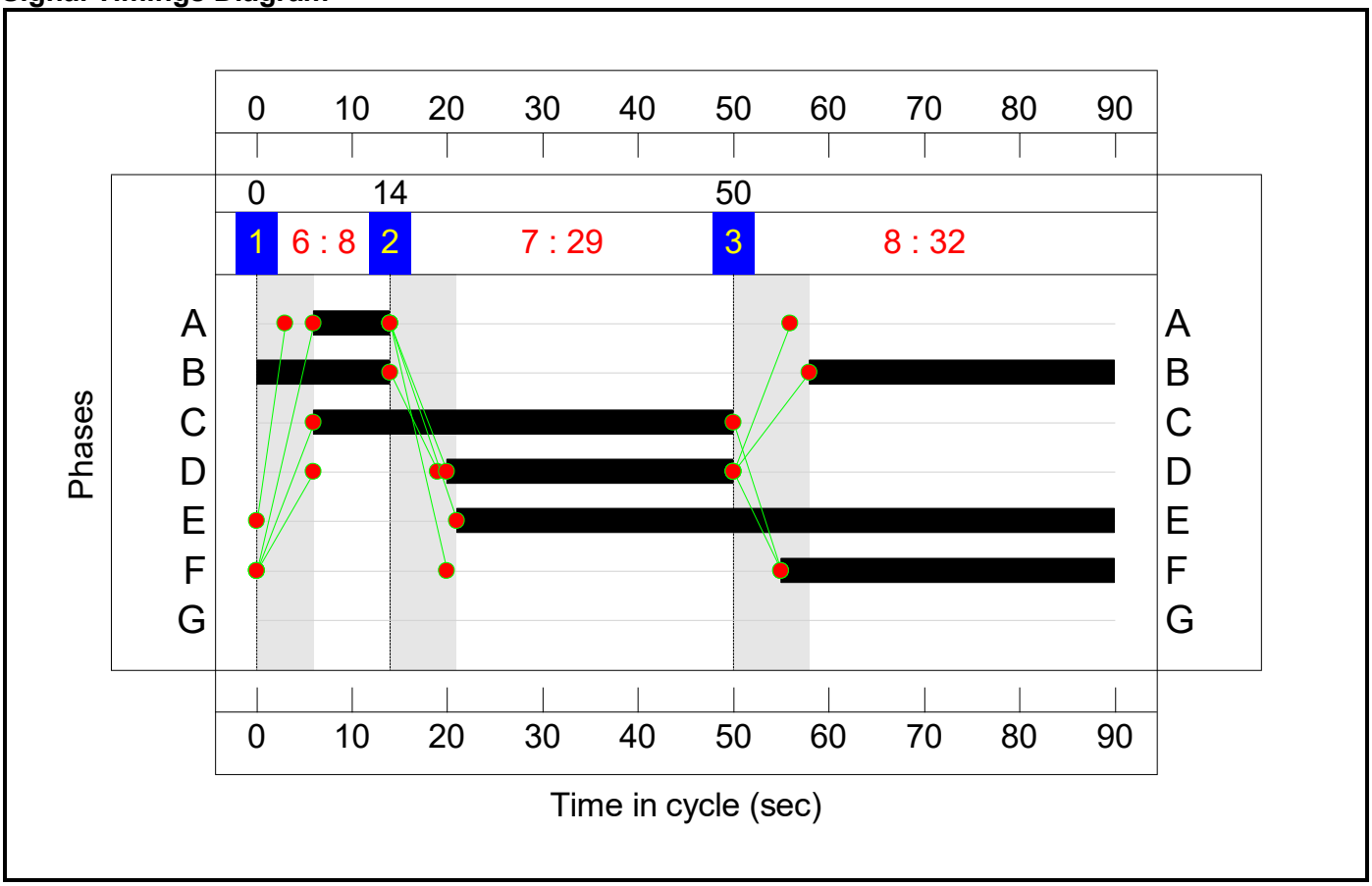
Stage Sequence Diagram



Stage Timings

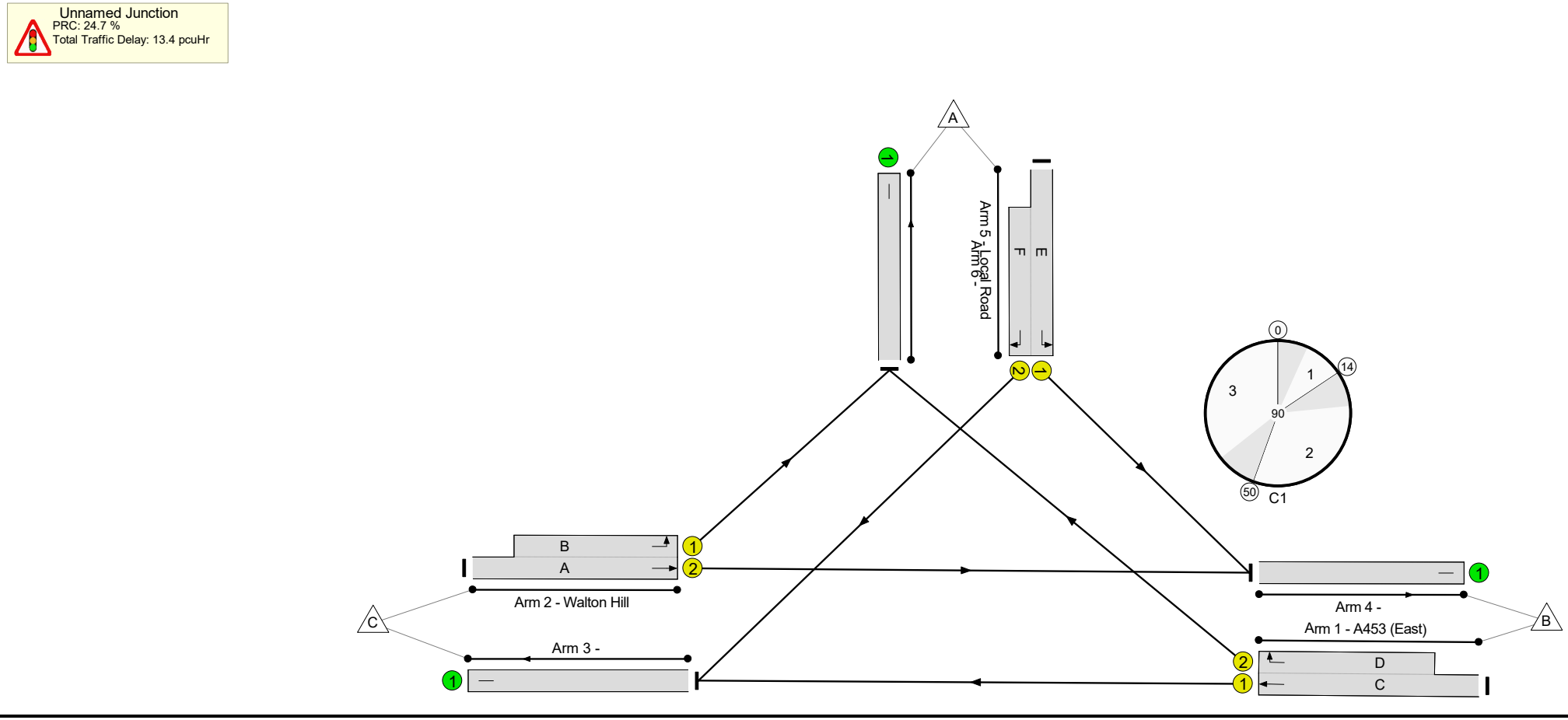
Stage	1	2	3
Duration	8	29	32
Change Point	0	14	50

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.2%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	44:30	-	850	1965:1828	552+630	71.9 : 71.9%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	8:46	-	300	2105:1828	210+234	67.5 : 67.5%
3/1		U	N/A	N/A	-		-	-	-	853	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	507	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	69:35	-	821	1786:1828	506+632	72.2 : 72.2%
6/1		U	N/A	N/A	-		-	-	-	611	Inf	Inf	0.0%

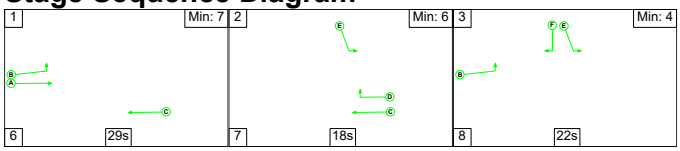
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**9.8**	**3.6**	**0.0**	**13.4**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**9.8**	**3.6**	**0.0**	**13.4**	-	-	-	-
1/1+1/2	850	850	-	-	-	4.8	1.3	-	6.1	25.7	9.8	1.3	11.1
2/2+2/1	300	300	-	-	-	2.0	1.0	-	3.1	36.7	3.4	1.0	4.4
3/1	853	853	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	507	507	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	821	821	-	-	-	3.0	1.3	-	4.3	18.9	9.0	1.3	10.3
6/1	611	611	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 24.7 Total Delay for Signalled Lanes (pcuHr): 13.43 Cycle Time (s): 90
PRC Over All Lanes (%): 24.7 Total Delay Over All Lanes(pcuHr): 13.43

Full Input Data And Results

Scenario 13: '2a 2038 Forecast Year with Dev' (FG13: '2a 2038 Forecast Year with Dev (AM)', Plan 1: 'Network Control Plan 1')

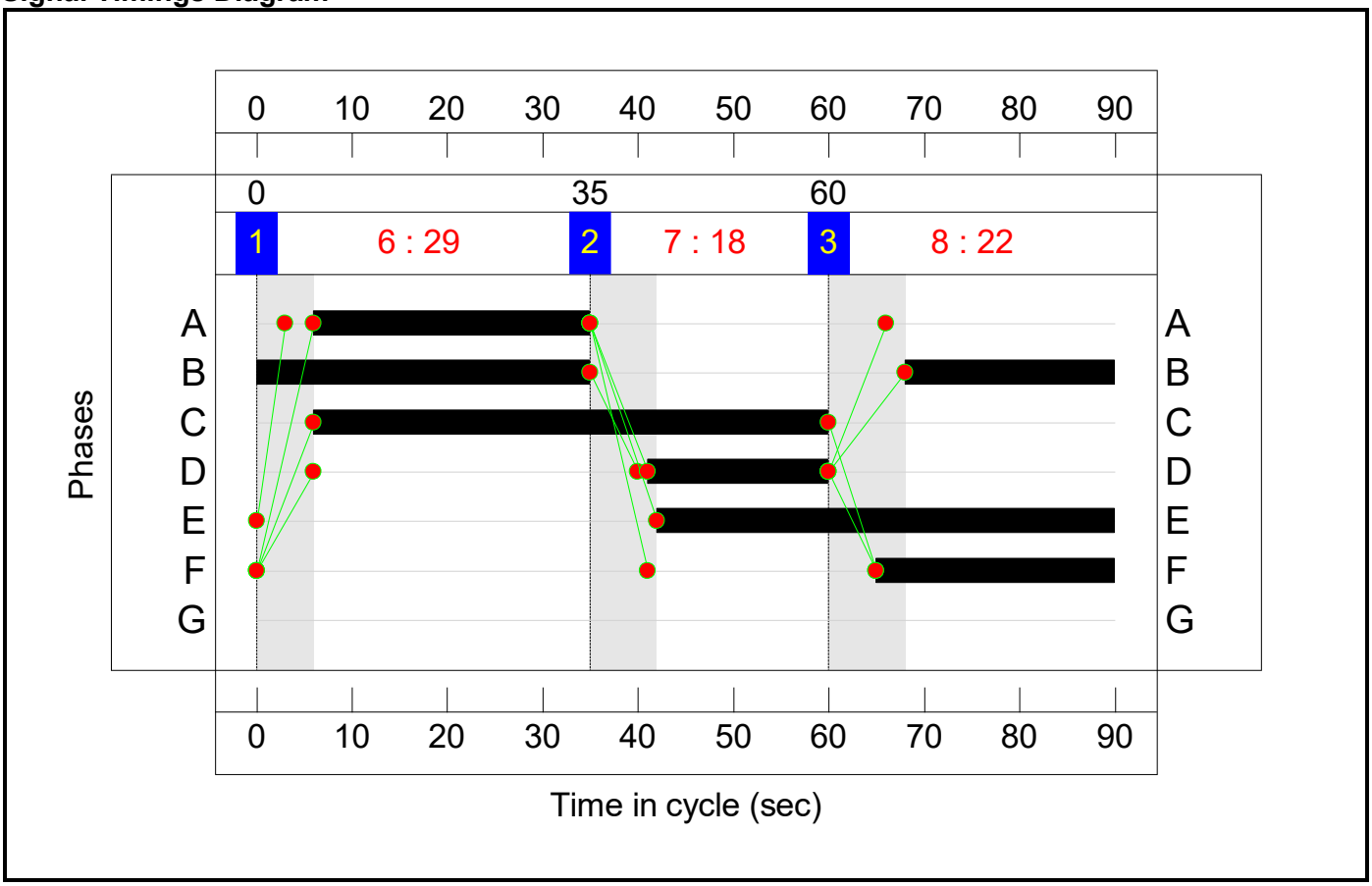
Stage Sequence Diagram



Stage Timings

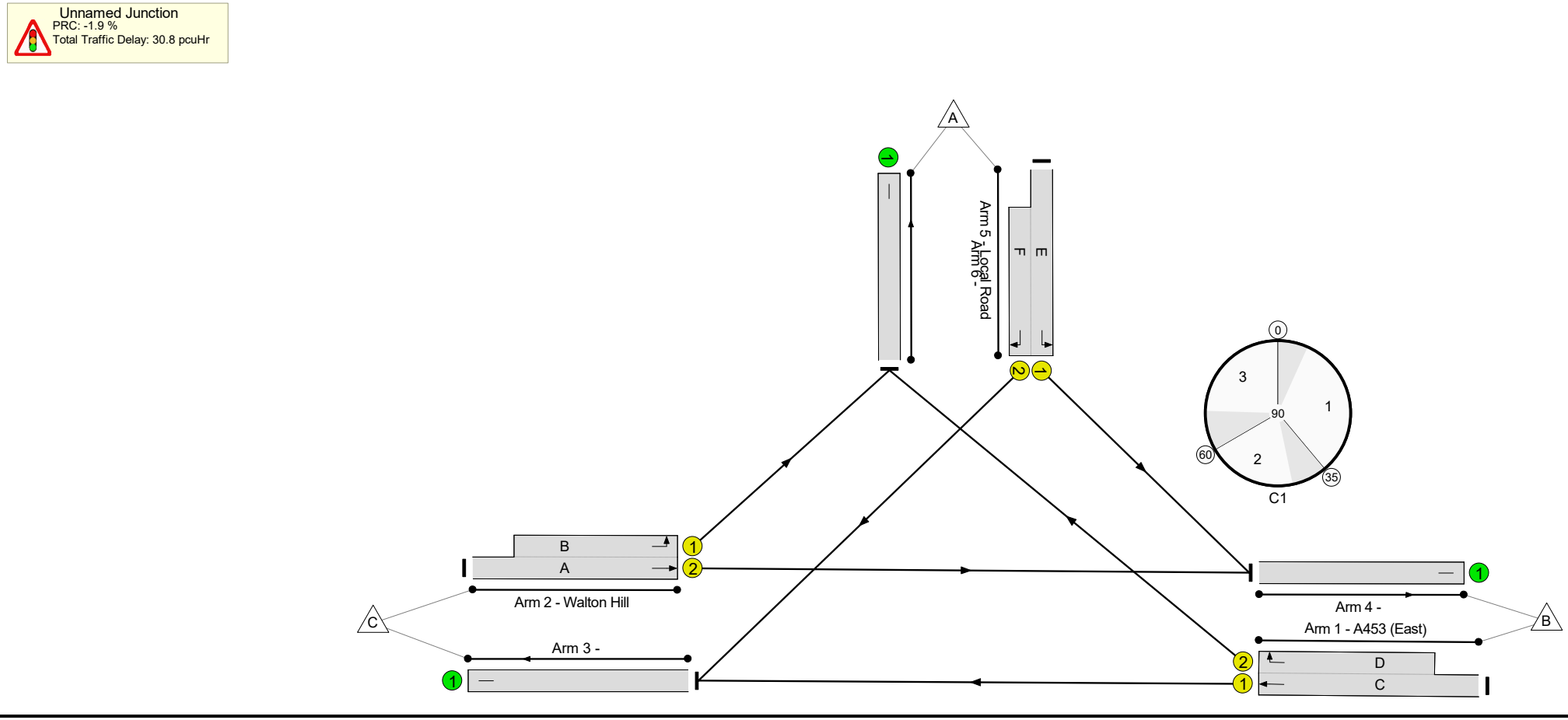
Stage	1	2	3
Duration	29	18	22
Change Point	0	35	60

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.7%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	54:19	-	656	1965:1828	316+406	90.8 : 90.8%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	29:57	-	1260	2105:1828	627+747	91.7 : 91.7%
3/1		U	N/A	N/A	-		-	-	-	760	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	1190	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	48:25	-	1088	1786:1828	676+520	91.0 : 91.0%
6/1		U	N/A	N/A	-		-	-	-	1054	Inf	Inf	0.0%

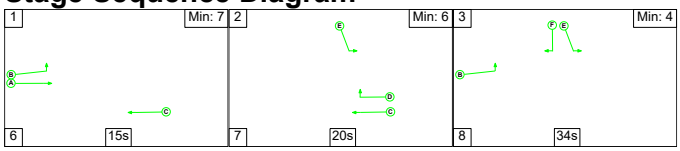
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**16.7**	**14.1**	**0.0**	**30.8**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**16.7**	**14.1**	**0.0**	**30.8**	-	-	-	-
1/1+1/2	656	656	-	-	-	4.1	4.4	-	8.5	46.7	8.9	4.4	13.3
2/2+2/1	1260	1260	-	-	-	6.1	5.1	-	11.2	32.0	13.1	5.1	18.2
3/1	760	760	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1190	1190	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1088	1088	-	-	-	6.5	4.6	-	11.1	36.7	11.3	4.6	15.9
6/1	1054	1054	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -1.9 Total Delay for Signalled Lanes (pcuHr): 30.81 Cycle Time (s): 90
PRC Over All Lanes (%): -1.9 Total Delay Over All Lanes(pcuHr): 30.81

Full Input Data And Results

Scenario 14: '2a 2038 Forecast Year with Dev' (FG14: '2a 2038 Forecast Year with Dev (PM)', Plan 1: 'Network Control Plan 1')

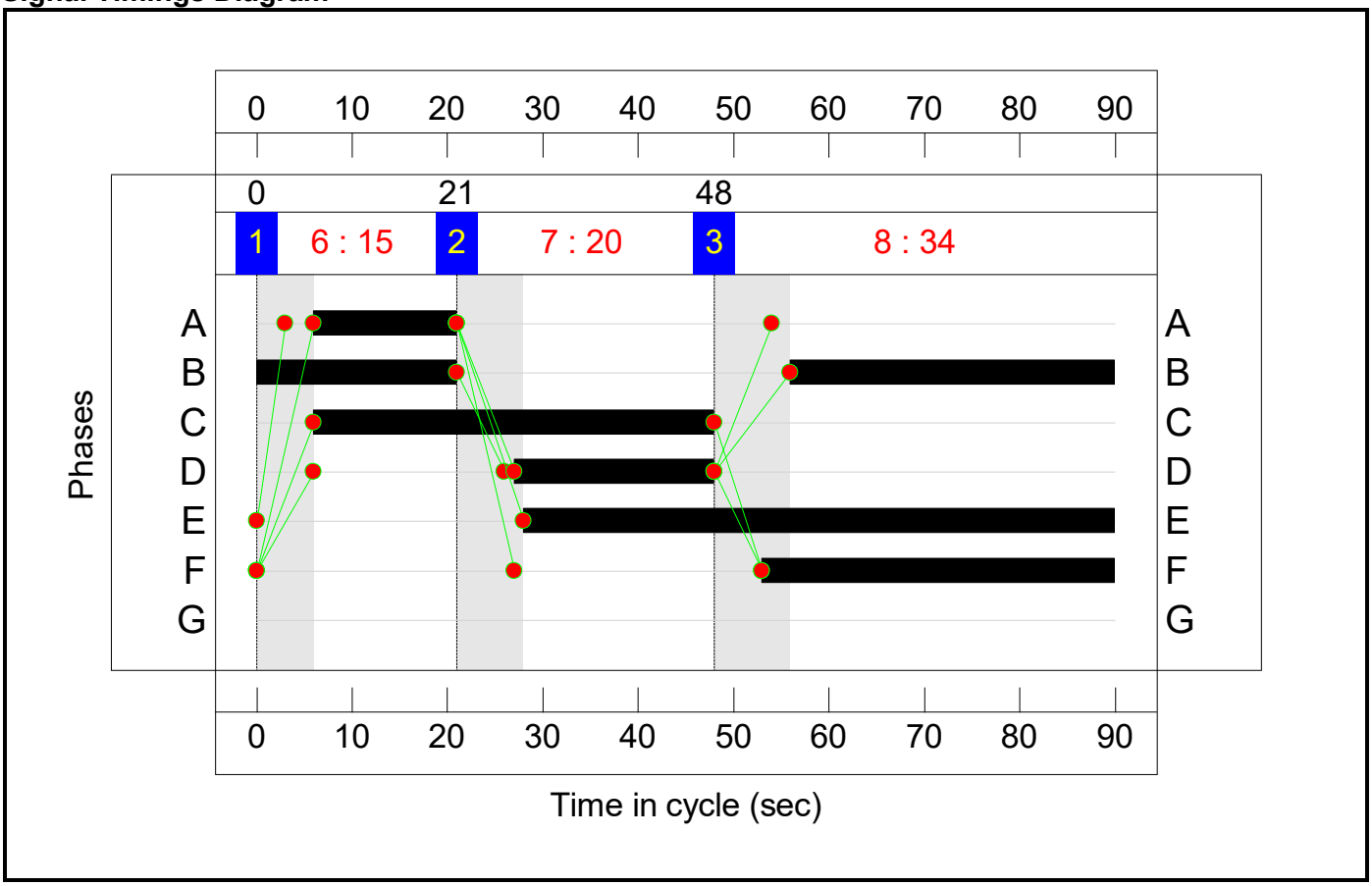
Stage Sequence Diagram



Stage Timings

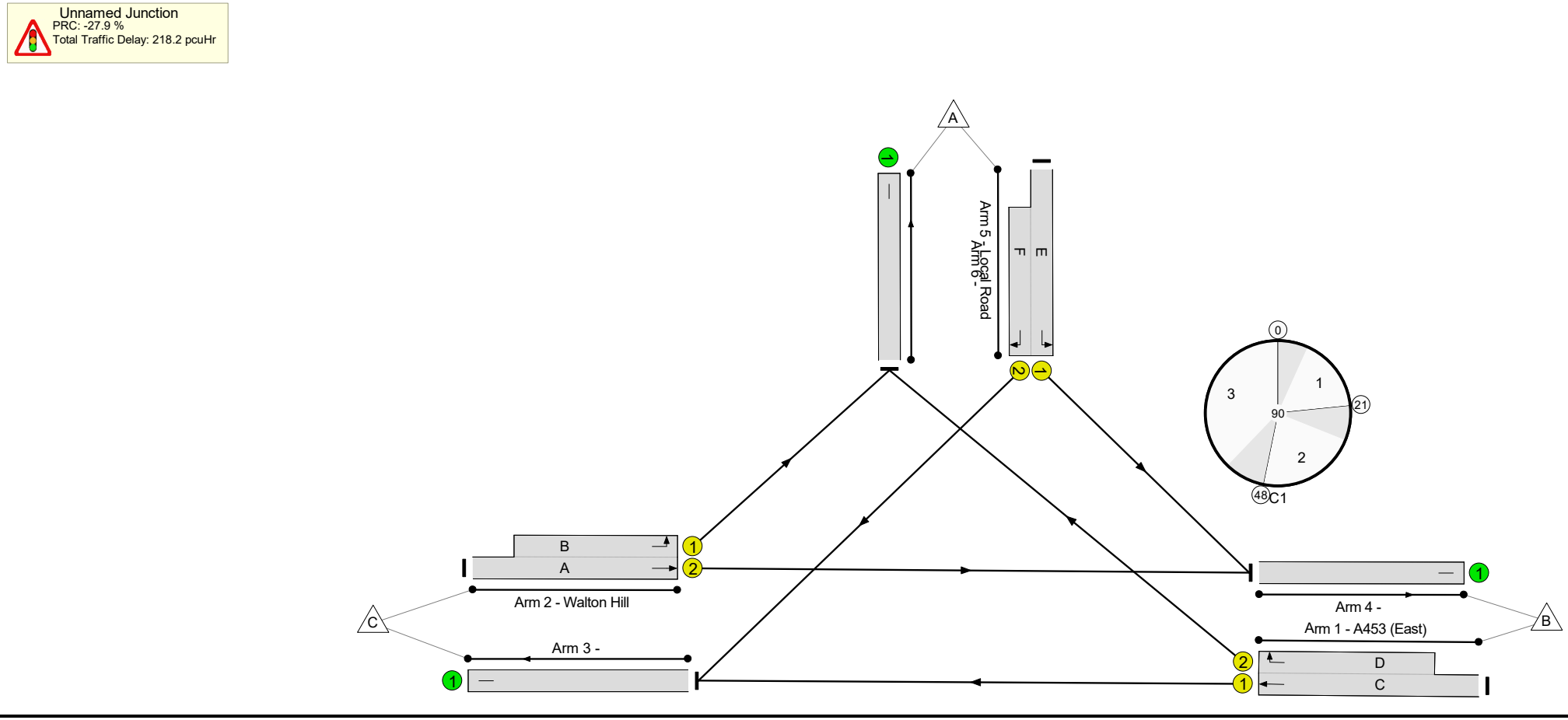
Stage	1	2	3
Duration	15	20	34
Change Point	0	21	48

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**115.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**115.1%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	42:21	-	994	1965:1828	445+447	111.4 : 111.4%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	15:55	-	1032	2105:1828	374+561	110.4 : 110.4%
3/1		U	N/A	N/A	-		-	-	-	1278	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	819	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	62:37	-	1188	1786:1828	353+679	115.1 : 115.1%
6/1		U	N/A	N/A	-		-	-	-	1117	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**27.7**	**190.6**	**0.0**	**218.2**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**27.7**	**190.6**	**0.0**	**218.2**	-	-	-	-
1/1+1/2	994	943	-	-	-	9.0	55.5	-	64.5	233.6	13.7	55.5	69.3
2/2+2/1	1032	993	-	-	-	7.7	53.3	-	61.0	212.7	11.3	53.3	64.6
3/1	1175	1175	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	727	727	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1188	1032	-	-	-	11.0	81.8	-	92.8	281.1	28.2	81.8	109.9
6/1	1066	1066	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -27.9 Total Delay for Signalled Lanes (pcuHr): 218.24 Cycle Time (s): 90
PRC Over All Lanes (%): -27.9 Total Delay Over All Lanes(pcuHr): 218.24

APPENDIX 56: Junction 11: A42 Junction 14 on-slip/Top Brand/Gelscoe Lane Roundabout Stage 1A/2A Modelling Results

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.0.0.2177
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Filename: 250619 A453_Gelscoe Lane roundabout (LS)_Stage 1a+2a.j11
Path: J:\2022\220500-East Midlands Gateway Phase 2 (1)\ProjectDelivery\01-WIP\DesignAndCalculations\T&I Planning\Traffic Models\11. A453_Gelscoe Lane_Top Brand roundabout (near A42)
Report generation date: 20/06/2025 16:53:53

»2022 | Base Flows | AM
»2022 | Base Flows | PM
»2028 | WoD Flows | AM
»2028 | WoD Flows | PM
»2028 | WD Flows | AM
»2028 | WD Flows | PM
»2038 | WoD Flows | AM
»2038 | WoD Flows | PM
»2038 | WD Flows | AM
»2038 | WD Flows | PM
»2028 | 2a WD Flows | AM
»2028 | 2a WD Flows | PM
»2038 | 2a WD Flows | AM
»2038 | 2a WD Flows | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	[Lane Simulation] - 2022 - Base Flows									
1 - A453 (N)	D1	0.4	4.64	0.20	A	D2	1.4	6.28	0.47	A
2 - Gelscoe Lane		0.1	4.19	0.04	A		0.1	5.01	0.05	A
3 - Top Brand		0.4	4.92	0.24	A		0.1	4.53	0.08	A
	[Lane Simulation] - 2028 - 2a WD Flows									
1 - A453 (N)	D11	0.9	5.91	0.32	A	D12	0.7	6.84	0.31	A
2 - Gelscoe Lane		0.2	4.70	0.10	A		0.4	5.13	0.18	A
3 - Top Brand		0.7	7.35	0.36	A		0.2	4.77	0.12	A
	[Lane Simulation] - 2028 - WD Flows									
1 - A453 (N)	D5	1.8	9.31	0.55	A	D6	1.2	7.74	0.35	A
2 - Gelscoe Lane		0.2	4.67	0.08	A		0.4	5.02	0.21	A
3 - Top Brand		0.6	6.18	0.25	A		0.2	4.37	0.09	A
	[Lane Simulation] - 2028 - WoD Flows									
1 - A453 (N)	D3	0.8	6.60	0.37	A	D4	1.0	7.31	0.35	A
2 - Gelscoe Lane		0.2	4.46	0.08	A		0.2	4.63	0.15	A
3 - Top Brand		0.5	6.35	0.23	A		0.2	4.75	0.08	A
	[Lane Simulation] - 2038 - 2a WD Flows									
1 - A453 (N)	D13	0.9	6.07	0.37	A	D14	1.3	6.74	0.36	A
2 - Gelscoe Lane		0.3	4.95	0.17	A		0.9	5.88	0.33	A
3 - Top Brand		1.5	9.83	0.51	A		0.6	6.11	0.28	A
	[Lane Simulation] - 2038 - WD Flows									
1 - A453 (N)	D9	1.8	8.76	0.57	A	D10	1.5	7.68	0.39	A
2 - Gelscoe Lane		0.3	5.06	0.15	A		1.0	6.70	0.36	A
3 - Top Brand		1.0	7.81	0.38	A		0.5	5.42	0.23	A
	[Lane Simulation] - 2038 - WoD Flows									
1 - A453 (N)	D7	1.0	6.37	0.40	A	D8	1.3	7.45	0.35	A
2 - Gelscoe Lane		0.4	4.95	0.16	A		0.4	5.02	0.19	A
3 - Top Brand		1.2	7.75	0.40	A		0.3	5.06	0.22	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	A453 Gelscoe Lane Top Brand roundabout
Location	
Site number	
Date	18/10/2023
Version	
Status	(new file)
Identifier	Aaiza
Client	
Jobnumber	220500
Enumerator	BWB\Aaiza.Shafiq
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Relaxation factor for capacity/RFC runs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials
Delay	1.00	100000	100000	Calculate for all arms	3.00	-1	3	1	60	✓			1402155294	101

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	Base Flows	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022	Base Flows	PM	ONE HOUR	16:45	18:15	15	✓
D3	2028	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D4	2028	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D5	2028	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D6	2028	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D7	2038	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D8	2038	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D9	2038	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D10	2038	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D11	2028	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D12	2028	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D13	2038	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D14	2038	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	✓	100.000	100.000

2022 | Base Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.72	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.72	A

Arms

Arms

Arm	Name	Description	No give-way line
1	A453 (N)		
2	Gelscoe Lane		
3	Top Brand		
4	A42		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - A453 (N)	3.88	7.16	18.0	24.0	58.0	9.6		
2 - Gelscoe Lane	3.26	6.87	35.0	45.0	58.0	14.7		
3 - Top Brand	3.56	6.87	36.0	44.0	58.0	14.7		
4 - A42								✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A453 (N)	0.633	1946
2 - Gelscoe Lane	0.635	1956
3 - Top Brand	0.643	2002
4 - A42		

The slope and intercept shown above include any corrections and adjustments.

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1 - A453 (N)	Evenly split	10.00
2 - Gelscoe Lane	Evenly split	10.00
3 - Top Brand	Evenly split	10.00
4 - A42	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1 - A453 (N)	Entry	1	1	2, 3	✓	4.00			0	99999	
			2	1, 4	✓	4.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
2 - Gelscoe Lane	Entry	1	1	3, 4	✓	5.00			0	99999	
			2	1, 2	✓	5.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
3 - Top Brand	Entry	1	1	1, 4	✓	5.00			0	99999	
			2	2, 3	✓	5.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
4 - A42	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - A453 (N)	Entry	1	1	0.316	973
			2	0.316	973
2 - Gelscoe Lane	Entry	1	1	0.317	978
			2	0.317	978
3 - Top Brand	Entry	1	1	0.321	1001
			2	0.321	1001

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			A453 (N)	Gelscoe Lane	Top Brand	A42
1 - A453 (N)	1	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
2 - Gelscoe Lane	1	1			✓	✓
		2	✓	✓		
	2	1	✓	✓	✓	✓
3 - Top Brand	1	1	✓			✓
		2		✓	✓	
	2	1	✓	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	Base Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	246	100.000
2 - Gelscoe Lane		ONE HOUR	✓	55	100.000
3 - Top Brand		ONE HOUR	✓	232	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	43	126	77
	2 - Gelscoe Lane	19	0	12	24
	3 - Top Brand	169	23	0	40
	4 - A42	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A453 (N)	0.20	4.64	0.4	A	228	342
2 - Gelscoe Lane	0.04	4.19	0.1	A	51	77
3 - Top Brand	0.24	4.92	0.4	A	212	318
4 - A42						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	186	47	15	1377	0.135	185	186	148	0.0	0.2	4.169	A
2 - Gelscoe Lane	42	11	153	1403	0.030	42	45	48	0.0	0.1	4.125	A
3 - Top Brand	179	45	92	1120	0.160	179	177	103	0.0	0.2	4.274	A
4 - A42			0					108				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	231	58	19	1383	0.167	230	228	167	0.2	0.4	4.389	A
2 - Gelscoe Lane	48	12	186	1409	0.034	48	55	63	0.1	0.0	4.130	A
3 - Top Brand	204	51	104	1073	0.190	203	213	130	0.2	0.3	4.524	A
4 - A42			0					121				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	276	69	24	1381	0.200	276	280	209	0.4	0.3	4.644	A
2 - Gelscoe Lane	59	15	228	1376	0.043	59	68	72	0.0	0.1	4.105	A
3 - Top Brand	257	64	132	1071	0.240	257	258	155	0.3	0.4	4.904	A
4 - A42			0					157				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	275	69	22	1349	0.204	278	275	202	0.3	0.2	4.528	A
2 - Gelscoe Lane	62	16	233	1392	0.045	63	66	67	0.1	0.1	4.148	A
3 - Top Brand	243	61	137	1103	0.220	243	255	159	0.4	0.4	4.923	A
4 - A42			0					156				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	218	54	22	1394	0.156	216	227	163	0.2	0.3	4.219	A
2 - Gelscoe Lane	50	12	180	1380	0.036	50	59	58	0.1	0.0	4.195	A
3 - Top Brand	209	52	110	1094	0.191	208	215	120	0.4	0.3	4.598	A
4 - A42			0					132				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	181	45	20	1370	0.132	182	190	145	0.3	0.2	4.098	A
2 - Gelscoe Lane	45	11	150	1411	0.032	46	46	52	0.0	0.0	3.947	A
3 - Top Brand	180	45	96	1076	0.167	181	183	99	0.3	0.2	4.285	A
4 - A42			0					111				

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	125	968	0.129	124	127	0.0	0.1	4.310	A
			2	1, 4	61	968	0.063	61	59	0.0	0.1	3.867	A
		2	1	(1, 2, 3, 4)	186			186	187	0.0	0.0	0.000	A
	Exit	1	1		148			148	146	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	29	929	0.031	29	30	0.0	0.0	4.209	A
			2	1, 2	13	929	0.014	13	15	0.0	0.0	3.962	A
		2	1	(1, 2, 3, 4)	42			42	46	0.0	0.0	0.000	A
	Exit	1	1		48			48	50	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	164	971	0.169	163	160	0.0	0.2	4.324	A
			2	2, 3	15	971	0.016	15	16	0.0	0.0	3.784	A
		2	1	(1, 2, 3, 4)	179			179	177	0.0	0.0	0.000	A
	Exit	1	1		103			103	104	0.0	0.0	0.000	A
4 - A42	Exit	1	1		108			108	108	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	163	967	0.169	162	159	0.1	0.3	4.599	A
			2	1, 4	68	967	0.070	68	69	0.1	0.1	3.908	A
		2	1	(1, 2, 3, 4)	231			231	229	0.0	0.0	0.001	A
	Exit	1	1		167			167	175	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	32	919	0.035	32	36	0.0	0.0	4.216	A
			2	1, 2	16	919	0.017	16	19	0.0	0.0	3.960	A
		2	1	(1, 2, 3, 4)	48			48	55	0.0	0.0	0.000	A
	Exit	1	1		63			63	62	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	184	967	0.191	184	193	0.2	0.3	4.609	A
			2	2, 3	19	967	0.020	19	21	0.0	0.0	3.720	A
		2	1	(1, 2, 3, 4)	204			204	214	0.0	0.0	0.001	A
	Exit	1	1		130			130	130	0.0	0.0	0.000	A
4 - A42	Exit	1	1		121			121	130	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	191	965	0.198	191	192	0.3	0.2	4.845	A
			2	1, 4	84	965	0.088	86	87	0.1	0.1	4.160	A
		2	1	(1, 2, 3, 4)	276			275	279	0.0	0.0	0.009	A
	Exit	1	1		209			209	212	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	41	906	0.045	41	45	0.0	0.0	4.272	A
			2	1, 2	19	906	0.021	19	22	0.0	0.0	3.767	A
		2	1	(1, 2, 3, 4)	59			59	68	0.0	0.0	0.000	A
	Exit	1	1		72			72	74	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	233	958	0.243	233	233	0.3	0.4	4.998	A
			2	2, 3	24	958	0.025	24	25	0.0	0.0	3.991	A
		2	1	(1, 2, 3, 4)	257			257	259	0.0	0.0	0.004	A
	Exit	1	1		155			155	159	0.0	0.0	0.000	A
4 - A42	Exit	1	1		157			157	160	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	187	966	0.194	190	189	0.2	0.1	4.719	A
			2	1, 4	87	966	0.090	89	86	0.1	0.1	4.095	A
		2	1	(1, 2, 3, 4)	275			275	275	0.0	0.0	0.009	A
	Exit	1	1		202			202	209	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	41	904	0.046	42	43	0.0	0.0	4.238	A
			2	1, 2	21	904	0.023	21	23	0.0	0.0	3.978	A
		2	1	(1, 2, 3, 4)	62			62	66	0.0	0.0	0.000	A
	Exit	1	1		67			67	72	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	221	957	0.231	221	231	0.4	0.4	5.016	A
			2	2, 3	22	957	0.023	22	24	0.0	0.0	3.933	A
		2	1	(1, 2, 3, 4)	243			243	256	0.0	0.0	0.009	A
	Exit	1	1		159			159	156	0.0	0.0	0.000	A
4 - A42	Exit	1	1		156			156	159	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	147	966	0.153	146	154	0.1	0.2	4.326	A
			2	1, 4	71	966	0.073	70	73	0.1	0.1	3.993	A
		2	1	(1, 2, 3, 4)	218			218	228	0.0	0.0	0.000	A
	Exit	1	1		163			163	173	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	35	921	0.038	35	39	0.0	0.0	4.116	A
			2	1, 2	15	921	0.016	15	19	0.0	0.0	4.355	A
		2	1	(1, 2, 3, 4)	50			50	59	0.0	0.0	0.000	A
	Exit	1	1		58			58	61	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	187	966	0.193	186	194	0.4	0.2	4.675	A
			2	2, 3	22	966	0.023	22	22	0.0	0.0	3.899	A
		2	1	(1, 2, 3, 4)	209			209	215	0.0	0.0	0.001	A
	Exit	1	1		120			120	127	0.0	0.0	0.000	A
4 - A42	Exit	1	1		132			132	140	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	121	967	0.125	121	129	0.2	0.2	4.209	A
			2	1, 4	60	967	0.062	61	60	0.1	0.0	3.857	A
		2	1	(1, 2, 3, 4)	181			181	189	0.0	0.0	0.001	A
	Exit	1	1		145			145	149	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	29	930	0.031	29	29	0.0	0.0	3.992	A
			2	1, 2	17	930	0.018	17	17	0.0	0.0	3.872	A
		2	1	(1, 2, 3, 4)	45			45	46	0.0	0.0	0.000	A
	Exit	1	1		52			52	51	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	160	970	0.164	161	165	0.2	0.2	4.317	A
			2	2, 3	20	970	0.021	20	18	0.0	0.0	4.004	A
		2	1	(1, 2, 3, 4)	180			180	183	0.0	0.0	0.000	A
	Exit	1	1		99			99	106	0.0	0.0	0.000	A
4 - A42	Exit	1	1		111			111	113	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	33	8	973	968	0.034	33	33	0.0	0.1	4.163	A
				3	92	23	973	968	0.095	92	94	0.0	0.1	4.362	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	61	15	973	968	0.063	61	59	0.0	0.1	3.867	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	33	8	-	-	-	33	33	0.0	0.0	0.000	A
				3	92	23	-	-	-	92	94	0.0	0.0	0.000	A
				4	61	15	-	-	-	61	59	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	910	865	0.013	11	11	0.0	0.0	4.074	A
				4	18	4	978	930	0.019	18	19	0.0	0.0	4.283	A
			2	1	13	3	968	920	0.015	13	15	0.0	0.0	3.962	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	13	3	-	-	-	13	16	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	11	0.0	0.0	0.000	A
				4	18	4	-	-	-	18	19	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	134	34	1001	972	0.138	134	130	0.0	0.1	4.317	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	7	1001	972	0.030	29	30	0.0	0.0	4.351	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	991	962	0.016	15	16	0.0	0.0	3.784	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	134	34	-	-	-	134	131	0.0	0.0	0.000	A
				2	15	4	-	-	-	15	16	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	7	-	-	-	30	30	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	973	967	0.045	43	41	0.1	0.1	4.686	A
				3	120	30	973	967	0.124	119	118	0.1	0.2	4.568	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	68	17	973	967	0.070	68	69	0.1	0.1	3.908	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	-	-	-	44	41	0.0	0.0	0.000	A
				3	120	30	-	-	-	120	118	0.0	0.0	0.001	A
				4	68	17	-	-	-	68	70	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	968	912	0.013	12	12	0.0	0.0	4.540	A
				4	20	5	978	921	0.022	21	24	0.0	0.0	4.052	A
			2	1	16	4	978	918	0.017	16	19	0.0	0.0	3.960	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	16	4	-	-	-	16	18	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	12	12	0.0	0.0	0.000	A
				4	20	5	-	-	-	20	24	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	152	38	1001	967	0.157	151	156	0.1	0.3	4.635	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	1001	968	0.033	33	37	0.0	0.0	4.495	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	19	5	991	957	0.020	19	21	0.0	0.0	3.720	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	152	38	-	-	-	152	157	0.0	0.0	0.001	A
				2	19	5	-	-	-	19	21	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	-	-	-	32	36	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	48	12	973	966	0.050	48	49	0.1	0.0	4.791	A
				3	142	36	973	965	0.148	142	143	0.2	0.1	4.863	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	84	21	973	965	0.087	86	87	0.1	0.1	4.160	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	48	12	-	-	-	48	49	0.0	0.0	0.015	A
				3	143	36	-	-	-	142	143	0.0	0.0	0.013	A
				4	84	21	-	-	-	84	87	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	968	898	0.014	12	16	0.0	0.0	4.262	A
				4	28	7	978	906	0.031	28	30	0.0	0.0	4.278	A
			2	1	19	5	978	907	0.021	19	22	0.0	0.0	3.767	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	19	5	-	-	-	19	22	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	-	-	-	13	16	0.0	0.0	0.000	A
				4	28	7	-	-	-	28	30	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	191	48	1001	958	0.199	190	190	0.3	0.3	4.997	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	43	11	1001	957	0.044	43	43	0.0	0.0	5.001	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	24	6	1001	958	0.025	24	25	0.0	0.0	3.991	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	191	48	-	-	-	191	190	0.0	0.0	0.004	A
				2	24	6	-	-	-	24	25	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	43	11	-	-	-	43	44	0.0	0.0	0.005	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	45	11	973	966	0.046	45	48	0.0	0.0	4.716	A
				3	143	36	973	966	0.148	145	141	0.1	0.1	4.720	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	87	22	973	966	0.090	89	86	0.1	0.1	4.095	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	45	11	-	-	-	45	48	0.0	0.0	0.006	A
				3	143	36	-	-	-	143	141	0.0	0.0	0.009	A
				4	87	22	-	-	-	87	86	0.0	0.0	0.011	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	4	920	851	0.017	15	15	0.0	0.0	4.275	A
				4	27	7	978	905	0.030	27	28	0.0	0.0	4.219	A
			2	1	21	5	978	905	0.023	21	23	0.0	0.0	3.978	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	21	5	-	-	-	21	23	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	4	-	-	-	14	15	0.0	0.0	0.000	A
				4	27	7	-	-	-	27	28	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	182	45	1001	958	0.190	181	187	0.3	0.3	5.008	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	39	10	1001	957	0.041	40	45	0.0	0.1	5.048	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	6	991	948	0.023	22	24	0.0	0.0	3.933	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	182	45	-	-	-	182	187	0.0	0.0	0.012	A
				2	22	6	-	-	-	22	24	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	39	10	-	-	-	39	45	0.0	0.0	0.002	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	36	9	973	967	0.037	36	39	0.0	0.0	4.357	A
				3	111	28	973	966	0.115	110	115	0.1	0.2	4.315	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	71	18	973	966	0.073	70	73	0.1	0.1	3.993	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	36	9	-	-	-	36	39	0.0	0.0	0.000	A
				3	111	28	-	-	-	111	115	0.0	0.0	0.000	A
				4	71	18	-	-	-	71	73	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	910	857	0.012	10	12	0.0	0.0	4.267	A
				4	24	6	978	921	0.026	24	27	0.0	0.0	4.048	A
			2	1	15	4	978	919	0.016	15	19	0.0	0.0	4.355	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	15	4	-	-	-	15	19	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	12	0.0	0.0	0.000	A
				4	24	6	-	-	-	24	27	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	149	37	1001	964	0.155	149	154	0.3	0.2	4.698	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	37	9	1001	965	0.039	38	40	0.1	0.0	4.590	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	5	1001	965	0.023	22	22	0.0	0.0	3.899	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	149	37	-	-	-	149	153	0.0	0.0	0.001	A
				2	22	5	-	-	-	22	22	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	37	9	-	-	-	37	40	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	33	8	973	967	0.034	32	33	0.0	0.1	4.148	A
				3	88	22	973	967	0.091	89	97	0.2	0.1	4.230	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	60	15	973	967	0.062	61	60	0.1	0.0	3.857	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	33	8	-	-	-	33	33	0.0	0.0	0.000	A
				3	88	22	-	-	-	88	96	0.0	0.0	0.002	A
				4	60	15	-	-	-	60	60	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	2	881	836	0.012	10	9	0.0	0.0	4.022	A
				4	19	5	968	922	0.020	19	20	0.0	0.0	3.978	A
			2	1	17	4	968	922	0.018	17	17	0.0	0.0	3.872	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	17	4	-	-	-	17	17	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	2	-	-	-	10	9	0.0	0.0	0.000	A
				4	19	5	-	-	-	19	20	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	127	32	1001	971	0.131	128	131	0.2	0.1	4.337	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	1001	972	0.033	32	33	0.0	0.0	4.237	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	20	5	991	961	0.021	20	18	0.0	0.0	4.004	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	127	32	-	-	-	127	131	0.0	0.0	0.000	A
				2	20	5	-	-	-	20	18	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	-	-	-	32	33	0.0	0.0	0.000	A

2022 | Base Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.03	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.03	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	Base Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	672	100.000
2 - Gelscoe Lane		ONE HOUR	✓	55	100.000
3 - Top Brand		ONE HOUR	✓	65	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	93	273	306
	2 - Gelscoe Lane	23	0	13	19
	3 - Top Brand	56	7	0	2
	4 - A42	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A453 (N)	0.47	6.28	1.4	A	616	924
2 - Gelscoe Lane	0.05	5.01	0.1	A	52	79
3 - Top Brand	0.08	4.53	0.1	A	63	95
4 - A42						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	511	128	5	1559	0.328	511	502	67	0.0	0.8	5.045	A
2 - Gelscoe Lane	44	11	436	1333	0.033	45	44	80	0.0	0.1	4.453	A
3 - Top Brand	53	13	261	1038	0.051	53	53	220	0.0	0.1	4.082	A
4 - A42			0					242				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	599	150	7	1553	0.386	601	608	71	0.8	0.7	5.424	A
2 - Gelscoe Lane	51	13	514	1310	0.039	50	56	94	0.1	0.0	4.558	A
3 - Top Brand	60	15	311	1016	0.059	59	63	254	0.1	0.1	4.393	A
4 - A42			0					292				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	741	185	7	1575	0.470	734	743	91	0.7	1.4	6.116	A
2 - Gelscoe Lane	64	16	632	1251	0.051	65	69	109	0.0	0.0	4.812	A
3 - Top Brand	76	19	385	972	0.078	76	77	312	0.1	0.0	4.529	A
4 - A42			0					363				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	727	182	7	1578	0.461	728	745	89	1.4	1.2	6.276	A
2 - Gelscoe Lane	65	16	626	1292	0.050	64	69	109	0.0	0.1	5.011	A
3 - Top Brand	70	17	388	975	0.072	70	76	303	0.0	0.1	4.510	A
4 - A42			0					362				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	612	153	8	1585	0.386	616	615	76	1.2	0.5	5.387	A
2 - Gelscoe Lane	47	12	534	1331	0.036	47	56	90	0.1	0.1	4.733	A
3 - Top Brand	67	17	314	1003	0.066	67	68	267	0.1	0.1	4.261	A
4 - A42			0					298				

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	503	126	6	1565	0.322	504	502	61	0.5	0.6	5.049	A
2 - Gelscoe Lane	43	11	435	1391	0.031	42	47	75	0.1	0.0	4.551	A
3 - Top Brand	53	13	259	1059	0.050	53	55	219	0.1	0.0	4.084	A
4 - A42			0					245				

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	284	971	0.293	285	273	0.0	0.5	5.106	A
			2	1, 4	227	971	0.234	227	229	0.0	0.3	4.896	A
		2	1	(1, 2, 3, 4)	511			511	505	0.0	0.0	0.036	A
	Exit	1	1		67			67	66	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	24	839	0.029	24	24	0.0	0.0	4.529	A
			2	1, 2	20	839	0.024	20	20	0.0	0.0	4.359	A
		2	1	(1, 2, 3, 4)	44			44	44	0.0	0.0	0.000	A
	Exit	1	1		80			80	77	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	48	917	0.053	48	48	0.0	0.0	4.107	A
			2	2, 3	5	917	0.006	5	6	0.0	0.0	3.872	A
		2	1	(1, 2, 3, 4)	53			53	54	0.0	0.0	0.000	A
	Exit	1	1		220			220	211	0.0	0.0	0.000	A
4 - A42	Exit	1	1		242			242	245	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	326	971	0.335	327	333	0.5	0.4	5.562	A
			2	1, 4	274	971	0.282	274	275	0.3	0.3	5.043	A
		2	1	(1, 2, 3, 4)	599			599	608	0.0	0.0	0.097	A
	Exit	1	1		71			71	78	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	31	815	0.038	30	33	0.0	0.0	4.536	A
			2	1, 2	20	815	0.024	20	24	0.0	0.0	4.589	A
		2	1	(1, 2, 3, 4)	51			51	56	0.0	0.0	0.000	A
	Exit	1	1		94			94	92	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	53	901	0.058	52	56	0.0	0.1	4.391	A
			2	2, 3	7	901	0.008	7	7	0.0	0.0	4.410	A
		2	1	(1, 2, 3, 4)	60			60	63	0.0	0.0	0.000	A
	Exit	1	1		254			254	262	0.0	0.0	0.000	A
4 - A42	Exit	1	1		292			292	295	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	401	971	0.413	400	405	0.4	0.6	6.103	A
			2	1, 4	339	971	0.349	335	337	0.3	0.7	5.497	A
		2	1	(1, 2, 3, 4)	741			740	745	0.0	0.1	0.288	A
	Exit	1	1		91			91	96	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	39	777	0.050	40	39	0.0	0.0	4.750	A
			2	1, 2	25	777	0.032	25	29	0.0	0.0	4.894	A
		2	1	(1, 2, 3, 4)	64			64	69	0.0	0.0	0.000	A
	Exit	1	1		109			109	109	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	68	877	0.078	69	70	0.1	0.0	4.573	A
			2	2, 3	8	877	0.009	7	7	0.0	0.0	4.115	A
		2	1	(1, 2, 3, 4)	76			76	77	0.0	0.0	0.000	A
	Exit	1	1		312			312	319	0.0	0.0	0.000	A
4 - A42	Exit	1	1		363			363	365	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	389	971	0.401	391	403	0.6	0.6	6.329	A
			2	1, 4	338	971	0.348	337	342	0.7	0.6	5.614	A
		2	1	(1, 2, 3, 4)	727			727	745	0.1	0.0	0.276	A
	Exit	1	1		89			89	96	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	38	779	0.049	37	40	0.0	0.1	5.040	A
			2	1, 2	26	779	0.034	27	29	0.0	0.0	4.971	A
		2	1	(1, 2, 3, 4)	65			65	69	0.0	0.0	0.000	A
	Exit	1	1		109			109	113	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	63	876	0.072	63	69	0.0	0.1	4.526	A
			2	2, 3	7	876	0.008	7	7	0.0	0.0	4.358	A
		2	1	(1, 2, 3, 4)	70			70	77	0.0	0.0	0.000	A
	Exit	1	1		303			303	313	0.0	0.0	0.000	A
4 - A42	Exit	1	1		362			362	368	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	335	971	0.345	337	337	0.6	0.3	5.533	A
			2	1, 4	278	971	0.287	279	278	0.6	0.3	5.033	A
		2	1	(1, 2, 3, 4)	612			613	612	0.0	0.0	0.081	A
	Exit	1	1		76			76	83	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	29	808	0.036	29	32	0.1	0.0	4.713	A
			2	1, 2	18	808	0.023	18	24	0.0	0.0	4.759	A
		2	1	(1, 2, 3, 4)	47			47	56	0.0	0.0	0.000	A
	Exit	1	1		90			90	93	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	59	900	0.066	59	60	0.1	0.1	4.270	A
			2	2, 3	8	900	0.008	8	8	0.0	0.0	4.197	A
		2	1	(1, 2, 3, 4)	67			67	68	0.0	0.0	0.000	A
	Exit	1	1		267			267	265	0.0	0.0	0.000	A
4 - A42	Exit	1	1		298			298	299	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	277	971	0.285	276	273	0.3	0.4	5.117	A
			2	1, 4	226	971	0.233	228	228	0.3	0.2	4.729	A
		2	1	(1, 2, 3, 4)	503			503	502	0.0	0.0	0.109	A
	Exit	1	1		61			61	68	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	26	840	0.031	26	27	0.0	0.0	4.663	A
			2	1, 2	17	840	0.020	17	20	0.0	0.0	4.397	A
		2	1	(1, 2, 3, 4)	43			43	47	0.0	0.0	0.000	A
	Exit	1	1		75			75	74	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	47	918	0.051	47	50	0.1	0.0	4.080	A
			2	2, 3	6	918	0.007	6	5	0.0	0.0	4.122	A
		2	1	(1, 2, 3, 4)	53			53	55	0.0	0.0	0.000	A
	Exit	1	1		219			219	217	0.0	0.0	0.000	A
4 - A42	Exit	1	1		245			245	245	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	75	19	973	971	0.077	75	72	0.0	0.1	5.219	A
				3	209	52	973	971	0.215	209	201	0.0	0.3	5.065	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	227	57	973	971	0.234	227	229	0.0	0.3	4.896	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	75	19	-	-	-	75	72	0.0	0.0	0.070	A
				3	209	52	-	-	-	209	202	0.0	0.0	0.033	A
				4	227	57	-	-	-	227	231	0.0	0.0	0.027	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	3	918	785	0.013	10	10	0.0	0.0	4.156	A
				4	14	4	942	809	0.017	14	14	0.0	0.0	4.791	A
			2	1	20	5	966	831	0.024	20	20	0.0	0.0	4.359	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	20	5	-	-	-	20	20	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	3	-	-	-	10	10	0.0	0.0	0.000	A
				4	14	4	-	-	-	14	14	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	47	12	1001	918	0.051	47	46	0.0	0.0	4.134	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.29	354	323	0.004	1	2	0.0	0.0	3.301	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	5	1	781	714	0.007	5	6	0.0	0.0	3.872	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	47	12	-	-	-	47	46	0.0	0.0	0.000	A
				2	5	1	-	-	-	5	6	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.29	-	-	-	1	2	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	86	22	973	971	0.089	86	85	0.1	0.1	5.647	A
				3	239	60	973	971	0.246	241	248	0.3	0.3	5.533	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	274	68	973	971	0.282	274	275	0.3	0.3	5.043	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	86	22	-	-	-	86	85	0.0	0.0	0.117	A
				3	239	60	-	-	-	239	248	0.0	0.0	0.111	A
				4	274	68	-	-	-	274	275	0.0	0.0	0.079	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	966	802	0.017	13	14	0.0	0.0	4.667	A
				4	17	4	978	814	0.021	17	19	0.0	0.0	4.436	A
			2	1	20	5	978	812	0.025	20	24	0.0	0.0	4.589	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	20	5	-	-	-	20	24	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	-	-	-	14	14	0.0	0.0	0.000	A
				4	17	4	-	-	-	17	18	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	52	13	1001	901	0.057	51	55	0.0	0.1	4.382	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.29	305	275	0.004	1	1	0.0	0.0	4.725	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	7	2	854	773	0.009	7	7	0.0	0.0	4.410	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	52	13	-	-	-	52	55	0.0	0.0	0.000	A
				2	7	2	-	-	-	7	7	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.29	-	-	-	1	1	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	101	25	973	971	0.104	102	102	0.1	0.1	5.934	A
				3	299	75	973	971	0.308	298	304	0.3	0.5	6.159	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	339	85	973	971	0.349	335	337	0.3	0.7	5.497	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	102	25	-	-	-	101	102	0.0	0.0	0.329	A
				3	300	75	-	-	-	299	305	0.0	0.0	0.307	A
				4	340	85	-	-	-	339	339	0.0	0.0	0.258	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	966	772	0.018	14	15	0.0	0.0	5.146	A
				4	25	6	978	782	0.033	26	25	0.0	0.0	4.514	A
			2	1	25	6	978	780	0.032	25	29	0.0	0.0	4.894	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	25	6	-	-	-	25	29	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	-	-	-	14	15	0.0	0.0	0.000	A
				4	25	6	-	-	-	25	25	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	65	16	1001	878	0.074	66	67	0.1	0.0	4.583	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.73	525	462	0.006	3	3	0.0	0.0	4.336	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	8	2	818	716	0.011	7	7	0.0	0.0	4.115	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	65	16	-	-	-	65	67	0.0	0.0	0.000	A
				2	8	2	-	-	-	8	7	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.73	-	-	-	3	3	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	102	26	973	971	0.105	102	106	0.1	0.1	6.239	A
				3	287	72	973	971	0.296	288	297	0.5	0.5	6.362	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	338	84	973	971	0.348	337	342	0.7	0.6	5.614	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	102	26	-	-	-	102	106	0.0	0.0	0.271	A
				3	287	72	-	-	-	287	297	0.0	0.0	0.281	A
				4	338	84	-	-	-	338	342	0.0	0.0	0.273	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	942	745	0.020	14	16	0.0	0.0	5.072	A
				4	24	6	966	768	0.031	23	23	0.0	0.0	5.018	A
			2	1	26	7	978	777	0.034	27	29	0.0	0.0	4.971	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	26	7	-	-	-	26	29	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	17	0.0	0.0	0.000	A
				4	24	6	-	-	-	24	23	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	62	15	1001	875	0.071	62	67	0.0	0.1	4.524	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.29	403	353	0.003	1	2	0.0	0.0	4.591	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	7	2	793	692	0.010	7	7	0.0	0.0	4.358	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	62	15	-	-	-	62	67	0.0	0.0	0.000	A
				2	7	2	-	-	-	7	7	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.29	-	-	-	1	2	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	81	20	973	971	0.083	82	85	0.1	0.0	5.724	A
				3	254	63	973	971	0.262	255	252	0.5	0.2	5.468	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	278	70	973	970	0.287	279	278	0.6	0.3	5.033	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	80	20	-	-	-	81	85	0.0	0.0	0.117	A
				3	254	63	-	-	-	254	251	0.0	0.0	0.095	A
				4	278	70	-	-	-	278	277	0.0	0.0	0.057	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	954	790	0.015	12	13	0.0	0.0	4.615	A
				4	17	4	966	801	0.021	17	19	0.0	0.0	4.779	A
			2	1	18	5	978	809	0.023	18	24	0.0	0.0	4.759	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	18	5	-	-	-	18	24	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	12	13	0.0	0.0	0.000	A
				4	17	4	-	-	-	17	19	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	58	14	1001	900	0.064	58	59	0.1	0.1	4.276	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.37	354	315	0.005	1	2	0.0	0.0	4.089	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	8	2	781	702	0.011	8	8	0.0	0.0	4.197	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	58	14	-	-	-	58	58	0.0	0.0	0.000	A
				2	8	2	-	-	-	8	8	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.37	-	-	-	1	2	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	973	971	0.071	69	69	0.0	0.1	5.047	A
				3	208	52	973	971	0.214	208	205	0.2	0.3	5.141	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	226	57	973	971	0.233	228	228	0.3	0.2	4.729	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	-	-	-	69	69	0.0	0.0	0.162	A
				3	208	52	-	-	-	208	205	0.0	0.0	0.123	A
				4	226	57	-	-	-	226	228	0.0	0.0	0.079	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	966	828	0.014	11	12	0.0	0.0	4.110	A
				4	14	4	954	818	0.018	14	15	0.0	0.0	5.127	A
			2	1	17	4	966	829	0.020	17	20	0.0	0.0	4.397	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	17	4	-	-	-	17	20	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	12	12	0.0	0.0	0.000	A
				4	14	4	-	-	-	14	15	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	44	11	1001	918	0.048	44	48	0.1	0.0	4.089	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.62	439	401	0.006	3	2	0.0	0.0	3.875	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	6	2	769	704	0.009	6	5	0.0	0.0	4.122	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	44	11	-	-	-	44	48	0.0	0.0	0.000	A
				2	6	2	-	-	-	6	5	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.62	-	-	-	2	2	0.0	0.0	0.000	A

2028 | WoD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.21	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.21	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	409	100.000
2 - Gelscoe Lane		ONE HOUR	✓	110	100.000
3 - Top Brand		ONE HOUR	✓	258	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	171	135	103
	2 - Gelscoe Lane	47	0	19	44
	3 - Top Brand	157	59	0	42
	4 - A42	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	1	29	11
	2 - Gelscoe Lane	0	0	6	5
	3 - Top Brand	24	0	0	91
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A453 (N)	0.37	6.60	0.8	A	375	563
2 - Gelscoe Lane	0.08	4.46	0.2	A	100	149
3 - Top Brand	0.23	6.35	0.5	A	232	348
4 - A42						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	300	75	44	1234	0.243	300	305	161	0.0	0.5	5.285	A
2 - Gelscoe Lane	87	22	181	1496	0.058	88	87	163	0.0	0.0	4.260	A
3 - Top Brand	199	50	155	1309	0.152	199	195	115	0.0	0.5	5.823	A
4 - A42			0					148				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	372	93	57	1269	0.293	375	367	173	0.5	0.5	5.735	A
2 - Gelscoe Lane	102	25	224	1416	0.072	101	104	208	0.0	0.1	4.150	A
3 - Top Brand	218	55	181	1220	0.179	218	234	144	0.5	0.4	5.528	A
4 - A42			0					169				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	458	115	61	1287	0.356	460	458	207	0.5	0.8	6.182	A
2 - Gelscoe Lane	111	28	258	1478	0.075	110	124	263	0.1	0.2	4.442	A
3 - Top Brand	266	67	200	1214	0.219	268	285	168	0.4	0.4	6.347	A
4 - A42			0					202				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	437	109	65	1172	0.373	437	451	229	0.8	0.7	6.596	A
2 - Gelscoe Lane	121	30	252	1422	0.085	121	124	250	0.2	0.1	4.461	A
3 - Top Brand	285	71	220	1258	0.227	285	294	153	0.4	0.5	6.317	A
4 - A42			0					211				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	363	91	55	1221	0.297	365	375	178	0.7	0.5	5.798	A
2 - Gelscoe Lane	98	24	212	1475	0.066	97	106	208	0.1	0.1	4.359	A
3 - Top Brand	228	57	183	1204	0.190	228	244	126	0.5	0.4	5.643	A
4 - A42			0					178				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	321	80	41	1282	0.251	319	320	149	0.5	0.6	5.293	A
2 - Gelscoe Lane	80	20	182	1548	0.052	80	89	179	0.1	0.1	4.407	A
3 - Top Brand	193	48	137	1270	0.152	196	199	126	0.4	0.3	5.558	A
4 - A42			0					141				

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	221	959	0.230	220	225	0.0	0.4	5.552	A
			2	1, 4	80	959	0.083	81	80	0.0	0.1	4.203	A
		2	1	(1, 2, 3, 4)	300			300	307	0.0	0.0	0.088	A
	Exit	1	1		161			161	150	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	48	920	0.052	49	51	0.0	0.0	4.322	A
			2	1, 2	39	920	0.042	39	36	0.0	0.0	4.176	A
		2	1	(1, 2, 3, 4)	87			87	87	0.0	0.0	0.000	A
	Exit	1	1		163			163	173	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	155	951	0.163	155	148	0.0	0.5	6.659	A
			2	2, 3	44	951	0.046	44	47	0.0	0.0	3.844	A
		2	1	(1, 2, 3, 4)	199			199	197	0.0	0.0	0.002	A
	Exit	1	1		115			115	114	0.0	0.0	0.000	A
4 - A42	Exit	1	1		148			148	151	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	276	955	0.289	279	271	0.4	0.4	5.889	A
			2	1, 4	96	955	0.100	96	96	0.1	0.1	4.559	A
		2	1	(1, 2, 3, 4)	372			371	367	0.0	0.1	0.193	A
	Exit	1	1		173			173	185	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	57	907	0.063	56	59	0.0	0.1	4.150	A
			2	1, 2	45	907	0.049	45	44	0.0	0.0	4.151	A
		2	1	(1, 2, 3, 4)	102			102	104	0.0	0.0	0.000	A
	Exit	1	1		208			208	206	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	162	943	0.171	162	177	0.5	0.3	6.125	A
			2	2, 3	57	943	0.061	57	57	0.0	0.0	4.070	A
		2	1	(1, 2, 3, 4)	218			218	233	0.0	0.0	0.025	A
	Exit	1	1		144			144	139	0.0	0.0	0.000	A
4 - A42	Exit	1	1		169			169	175	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	346	954	0.363	348	342	0.4	0.6	6.334	A
			2	1, 4	112	954	0.117	112	117	0.1	0.2	4.823	A
		2	1	(1, 2, 3, 4)	458			458	459	0.1	0.1	0.225	A
	Exit	1	1		207			207	222	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	69	896	0.077	69	74	0.1	0.1	4.667	A
			2	1, 2	42	896	0.047	42	50	0.0	0.1	4.122	A
		2	1	(1, 2, 3, 4)	111			111	124	0.0	0.0	0.002	A
	Exit	1	1		263			263	259	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	208	936	0.222	208	222	0.3	0.3	7.091	A
			2	2, 3	59	936	0.063	61	63	0.0	0.0	4.279	A
		2	1	(1, 2, 3, 4)	266			267	285	0.0	0.0	0.033	A
	Exit	1	1		168			168	169	0.0	0.0	0.000	A
4 - A42	Exit	1	1		202			202	217	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	319	952	0.335	319	331	0.6	0.5	6.614	A
			2	1, 4	116	952	0.122	118	120	0.2	0.1	4.854	A
		2	1	(1, 2, 3, 4)	437			435	450	0.1	0.2	0.449	A
	Exit	1	1		229			229	233	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	63	898	0.071	64	67	0.1	0.1	4.577	A
			2	1, 2	57	898	0.064	58	56	0.1	0.0	4.327	A
		2	1	(1, 2, 3, 4)	121			121	124	0.0	0.0	0.000	A
	Exit	1	1		250			250	259	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	220	930	0.237	220	227	0.3	0.4	6.965	A
			2	2, 3	65	930	0.070	65	67	0.0	0.1	4.165	A
		2	1	(1, 2, 3, 4)	285			285	294	0.0	0.0	0.148	A
	Exit	1	1		153			153	159	0.0	0.0	0.000	A
4 - A42	Exit	1	1		211			211	218	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	265	956	0.277	264	279	0.5	0.4	5.980	A
			2	1, 4	99	956	0.103	101	96	0.1	0.1	4.769	A
		2	1	(1, 2, 3, 4)	363			363	375	0.2	0.0	0.139	A
	Exit	1	1		178			178	193	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	56	911	0.061	56	61	0.1	0.1	4.500	A
			2	1, 2	42	911	0.046	42	45	0.0	0.1	4.177	A
		2	1	(1, 2, 3, 4)	98			98	106	0.0	0.0	0.000	A
	Exit	1	1		208			208	215	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	173	942	0.184	172	187	0.4	0.3	6.275	A
			2	2, 3	55	942	0.059	55	57	0.1	0.1	3.908	A
		2	1	(1, 2, 3, 4)	228			228	243	0.0	0.0	0.055	A
	Exit	1	1		126			126	137	0.0	0.0	0.000	A
4 - A42	Exit	1	1		178			178	179	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	246	960	0.256	247	240	0.4	0.4	5.593	A
			2	1, 4	75	960	0.078	73	80	0.1	0.2	4.233	A
		2	1	(1, 2, 3, 4)	321			321	321	0.0	0.0	0.042	A
	Exit	1	1		149			149	160	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	48	920	0.053	49	52	0.1	0.0	4.390	A
			2	1, 2	32	920	0.034	32	38	0.1	0.0	4.429	A
		2	1	(1, 2, 3, 4)	80			80	89	0.0	0.0	0.000	A
	Exit	1	1		179			179	178	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	152	957	0.159	154	156	0.3	0.3	6.227	A
			2	2, 3	41	957	0.043	41	44	0.1	0.0	3.641	A
		2	1	(1, 2, 3, 4)	193			194	199	0.0	0.0	0.041	A
	Exit	1	1		126			126	123	0.0	0.0	0.000	A
4 - A42	Exit	1	1		141			141	148	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	119	30	973	959	0.124	119	126	0.0	0.2	5.053	A
				3	102	25	973	959	0.106	101	99	0.0	0.2	6.359	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	80	20	973	959	0.083	81	80	0.0	0.1	4.203	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	119	30	-	-	-	119	126	0.0	0.0	0.102	A
				3	102	25	-	-	-	102	100	0.0	0.0	0.106	A
				4	80	20	-	-	-	80	81	0.0	0.0	0.047	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	929	874	0.016	14	15	0.0	0.0	4.722	A
				4	34	9	978	924	0.037	35	36	0.0	0.0	4.155	A
			2	1	39	10	978	918	0.042	39	36	0.0	0.0	4.176	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	39	10	-	-	-	39	36	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	-	-	-	14	15	0.0	0.0	0.000	A
				4	34	9	-	-	-	34	36	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	122	30	1001	952	0.128	122	114	0.0	0.3	6.293	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	33	8	1001	954	0.035	33	34	0.0	0.2	8.525	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	1001	952	0.046	44	47	0.0	0.0	3.844	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	122	30	-	-	-	122	115	0.0	0.0	0.003	A
				2	44	11	-	-	-	44	47	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	33	8	-	-	-	33	35	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	973	954	0.156	151	149	0.2	0.2	5.424	A
				3	127	32	973	955	0.133	128	122	0.2	0.3	6.612	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	96	24	973	954	0.100	96	96	0.1	0.1	4.559	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	-	-	-	149	149	0.0	0.0	0.214	A
				3	127	32	-	-	-	127	122	0.0	0.0	0.267	A
				4	96	24	-	-	-	96	96	0.0	0.0	0.074	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	978	910	0.017	15	17	0.0	0.0	4.024	A
				4	42	10	978	906	0.046	41	43	0.0	0.1	4.199	A
			2	1	45	11	978	903	0.049	45	44	0.0	0.0	4.151	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	45	11	-	-	-	45	44	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	17	0.0	0.0	0.000	A
				4	42	10	-	-	-	42	43	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	129	32	1001	944	0.137	129	141	0.3	0.3	5.780	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	1001	945	0.034	33	36	0.2	0.1	8.238	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	57	14	1001	944	0.061	57	57	0.0	0.0	4.070	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	129	32	-	-	-	129	140	0.0	0.0	0.041	A
				2	57	14	-	-	-	57	57	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	-	-	-	32	36	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	201	50	973	954	0.211	202	196	0.2	0.3	5.891	A
				3	145	36	973	954	0.152	146	146	0.3	0.3	7.092	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	112	28	973	954	0.117	112	117	0.1	0.2	4.823	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	201	50	-	-	-	201	196	0.0	0.1	0.237	A
				3	145	36	-	-	-	145	146	0.0	0.0	0.280	A
				4	112	28	-	-	-	112	117	0.0	0.0	0.145	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	22	5	978	895	0.024	22	23	0.0	0.0	4.476	A
				4	47	12	978	895	0.053	47	51	0.1	0.1	4.755	A
			2	1	42	11	978	895	0.047	42	50	0.0	0.1	4.122	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	42	11	-	-	-	42	50	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	22	5	-	-	-	22	23	0.0	0.0	0.009	A
				4	47	12	-	-	-	47	51	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	165	41	1001	936	0.176	164	172	0.3	0.3	6.681	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	44	11	1001	937	0.046	43	49	0.1	0.1	9.337	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	1001	934	0.064	61	63	0.0	0.0	4.279	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	164	41	-	-	-	165	172	0.0	0.0	0.039	A
				2	59	15	-	-	-	59	63	0.0	0.0	0.022	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	44	11	-	-	-	44	49	0.0	0.0	0.032	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	185	46	973	952	0.195	185	193	0.3	0.3	6.260	A
				3	133	33	973	953	0.139	134	139	0.3	0.2	7.239	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	116	29	973	952	0.122	118	120	0.2	0.1	4.854	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	186	47	-	-	-	185	193	0.1	0.1	0.519	A
				3	133	33	-	-	-	133	138	0.0	0.1	0.526	A
				4	117	29	-	-	-	116	119	0.0	0.0	0.247	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	978	897	0.021	19	20	0.0	0.0	4.218	A
				4	44	11	978	896	0.049	44	47	0.1	0.1	4.729	A
			2	1	57	14	978	899	0.064	58	56	0.1	0.0	4.327	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	57	14	-	-	-	57	56	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	-	-	-	19	20	0.0	0.0	0.000	A
				4	44	11	-	-	-	44	47	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	172	43	1001	931	0.184	172	176	0.3	0.3	6.521	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	48	12	1001	932	0.052	49	51	0.1	0.1	9.378	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	65	16	1001	930	0.070	65	67	0.0	0.1	4.165	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	172	43	-	-	-	172	177	0.0	0.0	0.162	A
				2	65	16	-	-	-	65	67	0.0	0.0	0.101	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	48	12	-	-	-	48	51	0.0	0.0	0.193	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	973	955	0.160	153	158	0.3	0.2	5.582	A
				3	111	28	973	956	0.116	111	121	0.2	0.2	6.645	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	99	25	973	955	0.103	101	96	0.1	0.1	4.769	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	-	-	-	153	158	0.1	0.0	0.167	A
				3	111	28	-	-	-	111	121	0.1	0.0	0.137	A
				4	99	25	-	-	-	99	96	0.0	0.0	0.090	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	962	895	0.017	15	16	0.0	0.0	4.896	A
				4	41	10	978	912	0.045	40	45	0.1	0.1	4.361	A
			2	1	42	10	978	912	0.046	42	45	0.0	0.1	4.177	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	42	10	-	-	-	42	45	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	16	0.0	0.0	0.000	A
				4	41	10	-	-	-	41	45	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	135	34	1001	942	0.143	136	148	0.3	0.2	5.900	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	37	9	984	926	0.040	36	38	0.1	0.2	8.522	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	1001	942	0.059	55	57	0.1	0.1	3.908	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	135	34	-	-	-	135	148	0.0	0.0	0.074	A
				2	55	14	-	-	-	55	57	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	37	9	-	-	-	37	39	0.0	0.0	0.101	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	137	34	973	960	0.143	138	134	0.2	0.2	5.242	A
				3	108	27	973	960	0.113	109	106	0.2	0.2	6.154	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	75	19	973	961	0.078	73	80	0.1	0.2	4.233	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	137	34	-	-	-	137	134	0.0	0.0	0.063	A
				3	108	27	-	-	-	108	106	0.0	0.0	0.026	A
				4	75	19	-	-	-	75	81	0.0	0.0	0.023	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	962	905	0.019	17	17	0.0	0.0	4.833	A
				4	31	8	978	921	0.034	31	34	0.1	0.0	4.171	A
			2	1	32	8	978	923	0.034	32	38	0.1	0.0	4.429	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	32	8	-	-	-	32	38	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	-	-	-	17	17	0.0	0.0	0.000	A
				4	31	8	-	-	-	31	34	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	117	29	1001	957	0.122	118	122	0.2	0.2	5.816	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	984	938	0.038	36	33	0.2	0.1	8.545	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	1001	957	0.043	41	44	0.1	0.0	3.641	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	117	29	-	-	-	117	122	0.0	0.0	0.045	A
				2	41	10	-	-	-	41	43	0.0	0.0	0.051	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	-	-	-	36	33	0.0	0.0	0.000	A

2028 | WoD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.35	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.35	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	425	100.000
2 - Gelscoe Lane		ONE HOUR	✓	133	100.000
3 - Top Brand		ONE HOUR	✓	113	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	169	106	150
	2 - Gelscoe Lane	23	0	45	65
	3 - Top Brand	46	63	0	4
	4 - A42	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	16	49	49
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	24	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A453 (N)	0.35	7.31	1.0	A	390	585
2 - Gelscoe Lane	0.15	4.63	0.2	A	122	183
3 - Top Brand	0.08	4.75	0.2	A	103	154
4 - A42						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	322	81	48	1363	0.236	322	317	46	0.0	0.8	6.586	A
2 - Gelscoe Lane	96	24	195	1118	0.086	97	96	175	0.0	0.1	4.239	A
3 - Top Brand	83	21	178	1494	0.056	82	84	114	0.0	0.2	4.210	A
4 - A42			0					166				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	392	98	55	1385	0.283	392	395	66	0.8	0.6	7.053	A
2 - Gelscoe Lane	124	31	240	1096	0.113	122	125	207	0.1	0.2	4.504	A
3 - Top Brand	103	26	228	1540	0.067	103	111	134	0.2	0.1	4.491	A
4 - A42			0					210				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	464	116	68	1382	0.336	470	474	73	0.6	1.0	6.978	A
2 - Gelscoe Lane	150	37	284	1028	0.146	149	153	252	0.2	0.2	4.542	A
3 - Top Brand	117	29	265	1443	0.081	116	130	168	0.1	0.2	4.420	A
4 - A42			0					242				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	458	115	73	1316	0.348	461	469	73	1.0	1.0	7.313	A
2 - Gelscoe Lane	142	35	281	1100	0.129	143	153	252	0.2	0.2	4.628	A
3 - Top Brand	124	31	263	1499	0.083	125	133	161	0.2	0.1	4.561	A
4 - A42			0					243				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	392	98	58	1367	0.287	391	393	65	1.0	1.0	6.718	A
2 - Gelscoe Lane	120	30	237	1102	0.109	121	127	211	0.2	0.1	4.566	A
3 - Top Brand	107	27	220	1512	0.071	107	108	138	0.1	0.1	4.753	A
4 - A42			0					203				

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	313	78	46	1362	0.230	311	333	51	1.0	0.6	6.234	A
2 - Gelscoe Lane	101	25	190	1121	0.090	100	104	166	0.1	0.1	4.167	A
3 - Top Brand	81	20	175	1496	0.054	80	91	116	0.1	0.1	4.350	A
4 - A42			0					158				

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	211	958	0.220	210	208	0.0	0.6	6.355	A
			2	1, 4	111	958	0.116	112	109	0.0	0.2	6.319	A
		2	1	(1, 2, 3, 4)	322			323	320	0.0	0.0	0.239	A
	Exit	1	1		46			46	52	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	82	916	0.089	82	79	0.0	0.1	4.389	A
			2	1, 2	14	916	0.016	14	17	0.0	0.0	3.550	A
		2	1	(1, 2, 3, 4)	96			96	96	0.0	0.0	0.000	A
	Exit	1	1		175			175	173	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	35	944	0.037	34	37	0.0	0.1	4.506	A
			2	2, 3	49	944	0.052	48	48	0.0	0.1	4.020	A
		2	1	(1, 2, 3, 4)	83			83	85	0.0	0.0	0.000	A
	Exit	1	1		114			114	114	0.0	0.0	0.000	A
4 - A42	Exit	1	1		166			166	158	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	245	956	0.256	244	254	0.6	0.4	6.871	A
			2	1, 4	147	956	0.154	148	141	0.2	0.2	6.615	A
		2	1	(1, 2, 3, 4)	392			392	394	0.0	0.0	0.267	A
	Exit	1	1		66			66	71	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	103	902	0.114	101	102	0.1	0.2	4.608	A
			2	1, 2	21	902	0.023	21	23	0.0	0.0	4.046	A
		2	1	(1, 2, 3, 4)	124			124	125	0.0	0.0	0.000	A
	Exit	1	1		207			207	215	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	47	927	0.051	48	51	0.1	0.0	5.079	A
			2	2, 3	56	927	0.060	55	60	0.1	0.1	4.077	A
		2	1	(1, 2, 3, 4)	103			103	110	0.0	0.0	0.000	A
	Exit	1	1		134			134	140	0.0	0.0	0.000	A
4 - A42	Exit	1	1		210			210	206	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	299	952	0.315	301	305	0.4	0.5	6.730	A
			2	1, 4	164	952	0.172	167	169	0.2	0.4	6.766	A
		2	1	(1, 2, 3, 4)	464			464	475	0.0	0.0	0.235	A
	Exit	1	1		73			73	78	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	123	888	0.139	121	125	0.2	0.2	4.650	A
			2	1, 2	27	888	0.030	27	28	0.0	0.0	4.055	A
		2	1	(1, 2, 3, 4)	150			150	153	0.0	0.0	0.000	A
	Exit	1	1		252			252	264	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	48	916	0.053	48	55	0.0	0.0	4.829	A
			2	2, 3	69	916	0.075	68	75	0.1	0.1	4.169	A
		2	1	(1, 2, 3, 4)	117			117	131	0.0	0.0	0.000	A
	Exit	1	1		168			168	168	0.0	0.0	0.000	A
4 - A42	Exit	1	1		242			242	248	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	290	950	0.305	294	301	0.5	0.4	6.813	A
			2	1, 4	167	950	0.176	167	168	0.4	0.5	7.046	A
		2	1	(1, 2, 3, 4)	458			457	469	0.0	0.1	0.425	A
	Exit	1	1		73			73	81	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	118	889	0.133	120	127	0.2	0.1	4.756	A
			2	1, 2	24	889	0.027	23	26	0.0	0.1	4.004	A
		2	1	(1, 2, 3, 4)	142			142	153	0.0	0.0	0.000	A
	Exit	1	1		252			252	257	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	51	916	0.056	53	60	0.0	0.1	4.892	A
			2	2, 3	73	916	0.080	73	74	0.1	0.1	4.342	A
		2	1	(1, 2, 3, 4)	124			124	133	0.0	0.0	0.000	A
	Exit	1	1		161			161	170	0.0	0.0	0.000	A
4 - A42	Exit	1	1		243			243	246	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	256	955	0.268	253	252	0.4	0.6	6.658	A
			2	1, 4	136	955	0.142	136	141	0.5	0.3	6.278	A
		2	1	(1, 2, 3, 4)	392			392	393	0.1	0.0	0.184	A
	Exit	1	1		65			65	69	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	99	903	0.110	100	104	0.1	0.1	4.619	A
			2	1, 2	21	903	0.023	21	23	0.1	0.0	4.315	A
		2	1	(1, 2, 3, 4)	120			120	127	0.0	0.0	0.000	A
	Exit	1	1		211			211	216	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	50	930	0.054	49	50	0.1	0.1	5.255	A
			2	2, 3	57	930	0.061	58	58	0.1	0.0	4.389	A
		2	1	(1, 2, 3, 4)	107			107	108	0.0	0.0	0.000	A
	Exit	1	1		138			138	138	0.0	0.0	0.000	A
4 - A42	Exit	1	1		203			203	206	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	205	959	0.213	202	218	0.6	0.4	6.143	A
			2	1, 4	109	959	0.114	109	115	0.3	0.2	6.149	A
		2	1	(1, 2, 3, 4)	313			313	332	0.0	0.0	0.089	A
2 - Gelscoe Lane	Entry	1	1	3, 4	82	918	0.090	82	86	0.1	0.1	4.160	A
			2	1, 2	19	918	0.020	18	18	0.0	0.0	4.200	A
		2	1	(1, 2, 3, 4)	101			101	104	0.0	0.0	0.000	A
	Exit	1	1		166			166	185	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	36	945	0.038	35	38	0.1	0.1	4.948	A
			2	2, 3	46	945	0.048	46	52	0.0	0.1	3.993	A
		2	1	(1, 2, 3, 4)	81			81	91	0.0	0.0	0.000	A
	Exit	1	1		116			116	120	0.0	0.0	0.000	A
4 - A42	Exit	1	1		158			158	169	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	973	958	0.133	127	126	0.0	0.2	5.728	A
				3	83	21	973	957	0.087	83	82	0.0	0.4	7.597	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	111	28	973	958	0.116	112	109	0.0	0.2	6.319	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	-	-	-	127	127	0.0	0.0	0.261	A
				3	83	21	-	-	-	83	83	0.0	0.0	0.262	A
				4	111	28	-	-	-	111	110	0.0	0.0	0.189	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	31	8	978	917	0.033	31	32	0.0	0.0	4.447	A
				4	51	13	978	917	0.056	51	46	0.0	0.1	4.349	A
			2	1	14	4	961	901	0.016	14	17	0.0	0.0	3.550	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	14	4	-	-	-	14	17	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	31	8	-	-	-	31	32	0.0	0.0	0.000	A
				4	51	13	-	-	-	51	47	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	32	8	1001	946	0.034	31	35	0.0	0.1	4.550	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.66	407	383	0.007	3	2	0.0	0.0	3.888	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1001	947	0.051	48	48	0.0	0.1	4.020	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	32	8	-	-	-	32	35	0.0	0.0	0.000	A
				2	49	12	-	-	-	49	48	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.66	-	-	-	3	2	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	973	955	0.160	152	155	0.2	0.2	6.363	A
				3	91	23	973	955	0.096	92	99	0.4	0.2	7.919	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	147	37	973	955	0.154	148	141	0.2	0.2	6.615	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	-	-	-	153	155	0.0	0.0	0.276	A
				3	91	23	-	-	-	91	98	0.0	0.0	0.329	A
				4	147	37	-	-	-	147	141	0.0	0.0	0.212	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	44	11	978	902	0.048	43	41	0.0	0.1	4.649	A
				4	59	15	978	900	0.066	59	61	0.1	0.1	4.579	A
			2	1	21	5	961	889	0.024	21	23	0.0	0.0	4.046	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	21	5	-	-	-	21	23	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	44	11	-	-	-	44	41	0.0	0.0	0.000	A
				4	59	15	-	-	-	59	61	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	45	11	1001	929	0.048	45	48	0.1	0.0	5.158	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.71	560	521	0.005	3	4	0.0	0.0	4.254	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	1001	927	0.060	55	60	0.1	0.1	4.077	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	45	11	-	-	-	45	47	0.0	0.0	0.000	A
				2	56	14	-	-	-	56	60	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.71	-	-	-	3	4	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	185	46	973	951	0.194	184	189	0.2	0.3	6.237	A
				3	116	29	973	950	0.122	117	117	0.2	0.2	7.769	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	164	41	973	951	0.172	167	169	0.2	0.4	6.766	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	185	46	-	-	-	185	189	0.0	0.0	0.258	A
				3	116	29	-	-	-	116	117	0.0	0.0	0.282	A
				4	164	41	-	-	-	164	170	0.0	0.0	0.170	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	51	13	978	888	0.058	50	51	0.1	0.1	4.666	A
				4	72	18	978	887	0.081	71	74	0.1	0.1	4.639	A
			2	1	27	7	978	888	0.030	27	28	0.0	0.0	4.055	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	27	7	-	-	-	27	28	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	51	13	-	-	-	51	51	0.0	0.0	0.000	A
				4	72	18	-	-	-	72	74	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	45	11	1001	913	0.050	45	51	0.0	0.0	4.945	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.76	645	588	0.005	3	5	0.0	0.0	3.847	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	1001	915	0.075	68	75	0.1	0.1	4.169	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	45	11	-	-	-	45	51	0.0	0.0	0.000	A
				2	69	17	-	-	-	69	75	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.76	-	-	-	3	5	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	178	45	973	950	0.188	180	183	0.3	0.3	6.296	A
				3	112	28	973	949	0.118	114	118	0.2	0.1	7.862	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	167	42	973	950	0.176	167	168	0.4	0.5	7.046	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	179	45	-	-	-	178	183	0.0	0.1	0.474	A
				3	112	28	-	-	-	112	117	0.0	0.0	0.388	A
				4	167	42	-	-	-	167	168	0.0	0.0	0.382	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	45	11	978	888	0.051	47	53	0.1	0.0	4.633	A
				4	73	18	978	890	0.082	73	75	0.1	0.1	4.842	A
			2	1	24	6	978	890	0.027	23	26	0.0	0.1	4.004	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	24	6	-	-	-	24	26	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	45	11	-	-	-	45	52	0.0	0.0	0.000	A
				4	73	18	-	-	-	73	75	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	48	12	1001	917	0.053	50	56	0.0	0.1	4.944	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.76	628	575	0.005	3	4	0.0	0.0	4.277	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	1001	917	0.080	73	74	0.1	0.1	4.342	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	48	12	-	-	-	48	56	0.0	0.0	0.000	A
				2	73	18	-	-	-	73	74	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.76	-	-	-	3	4	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	156	39	973	954	0.163	154	158	0.3	0.5	6.149	A
				3	100	25	973	955	0.105	100	94	0.1	0.1	7.739	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	136	34	973	955	0.142	136	141	0.5	0.3	6.278	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	156	39	-	-	-	156	159	0.1	0.0	0.230	A
				3	100	25	-	-	-	100	95	0.0	0.0	0.178	A
				4	136	34	-	-	-	136	140	0.0	0.0	0.122	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	37	9	978	903	0.041	38	44	0.0	0.0	4.644	A
				4	62	15	978	903	0.068	62	61	0.1	0.1	4.602	A
			2	1	21	5	978	905	0.023	21	23	0.1	0.0	4.315	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	21	5	-	-	-	21	22	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	37	9	-	-	-	37	43	0.0	0.0	0.000	A
				4	62	15	-	-	-	62	61	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	45	11	1001	929	0.049	45	46	0.1	0.1	5.400	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	746	692	0.006	4	4	0.0	0.0	4.031	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	57	14	1001	930	0.061	58	58	0.1	0.0	4.389	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	45	11	-	-	-	45	46	0.0	0.0	0.000	A
				2	57	14	-	-	-	57	58	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	-	-	-	4	4	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	123	31	973	959	0.128	121	132	0.5	0.2	5.724	A
				3	82	20	973	957	0.085	81	86	0.1	0.2	6.972	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	109	27	973	958	0.114	109	115	0.3	0.2	6.149	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	123	31	-	-	-	123	131	0.0	0.0	0.089	A
				3	82	20	-	-	-	82	86	0.0	0.0	0.139	A
				4	109	27	-	-	-	109	114	0.0	0.0	0.051	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	978	915	0.038	35	34	0.0	0.0	4.112	A
				4	47	12	978	916	0.052	47	52	0.1	0.1	4.193	A
			2	1	19	5	961	901	0.021	18	18	0.0	0.0	4.200	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	19	5	-	-	-	19	18	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	-	-	-	35	34	0.0	0.0	0.000	A
				4	47	12	-	-	-	47	51	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	34	8	1001	944	0.036	33	35	0.1	0.1	4.970	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.46	526	493	0.004	2	3	0.0	0.0	4.729	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	11	1001	944	0.048	46	52	0.0	0.1	3.993	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	34	8	-	-	-	34	35	0.0	0.0	0.000	A
				2	46	11	-	-	-	46	53	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.46	-	-	-	2	3	0.0	0.0	0.000	A

2028 | WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	7.86	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.86	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2028	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	573	100.000
2 - Gelscoe Lane		ONE HOUR	✓	113	100.000
3 - Top Brand		ONE HOUR	✓	286	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	328	136	109
	2 - Gelscoe Lane	55	0	17	41
	3 - Top Brand	162	83	0	41
	4 - A42	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	27	11
	2 - Gelscoe Lane	0	0	6	5
	3 - Top Brand	23	0	0	95
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A453 (N)	0.55	9.31	1.8	A	525	788
2 - Gelscoe Lane	0.08	4.67	0.2	A	102	154
3 - Top Brand	0.25	6.18	0.6	A	263	394
4 - A42						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	435	109	64	1163	0.374	435	435	173	0.0	0.8	6.117	A
2 - Gelscoe Lane	86	22	200	1483	0.058	87	87	296	0.0	0.1	4.455	A
3 - Top Brand	219	55	156	1366	0.160	216	225	131	0.0	0.5	5.685	A
4 - A42			0					136				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	520	130	69	1193	0.436	519	532	192	0.8	1.1	6.941	A
2 - Gelscoe Lane	102	26	233	1531	0.067	102	109	356	0.1	0.1	4.106	A
3 - Top Brand	256	64	185	1296	0.198	255	257	150	0.5	0.6	5.555	A
4 - A42			0					179				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	626	157	92	1165	0.538	626	632	245	1.1	1.7	8.921	A
2 - Gelscoe Lane	121	30	271	1482	0.082	121	133	447	0.1	0.2	4.524	A
3 - Top Brand	322	80	219	1276	0.252	323	334	173	0.6	0.4	6.183	A
4 - A42			0					206				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	631	158	90	1151	0.548	630	633	247	1.7	1.8	9.312	A
2 - Gelscoe Lane	118	30	270	1463	0.081	118	132	449	0.2	0.1	4.673	A
3 - Top Brand	321	80	220	1265	0.254	322	318	169	0.4	0.4	5.639	A
4 - A42			0					206				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	506	126	74	1189	0.425	513	531	190	1.8	0.6	7.464	A
2 - Gelscoe Lane	103	26	219	1469	0.070	104	110	367	0.1	0.1	4.421	A
3 - Top Brand	250	63	179	1309	0.191	250	261	143	0.4	0.3	5.765	A
4 - A42			0					167				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	435	109	64	1195	0.364	434	435	160	0.6	0.6	6.174	A
2 - Gelscoe Lane	84	21	174	1496	0.056	84	93	324	0.1	0.1	4.382	A
3 - Top Brand	209	52	150	1342	0.156	208	217	108	0.3	0.3	5.135	A
4 - A42			0					134				

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	354	953	0.372	353	356	0.0	0.7	6.184	A
			2	1, 4	80	953	0.083	80	79	0.0	0.1	4.662	A
		2	1	(1, 2, 3, 4)	435			434	438	0.0	0.1	0.191	A
	Exit	1	1		173			173	170	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	37	914	0.041	37	41	0.0	0.0	4.829	A
			2	1, 2	49	914	0.054	50	45	0.0	0.0	4.136	A
		2	1	(1, 2, 3, 4)	86			86	87	0.0	0.0	0.000	A
	Exit	1	1		296			296	312	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	155	951	0.163	152	158	0.0	0.4	6.591	A
			2	2, 3	64	951	0.067	64	67	0.0	0.0	3.963	A
		2	1	(1, 2, 3, 4)	219			219	227	0.0	0.0	0.034	A
	Exit	1	1		131			131	122	0.0	0.0	0.000	A
4 - A42	Exit	1	1		136			136	142	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	421	951	0.443	422	433	0.7	0.9	6.880	A
			2	1, 4	99	951	0.104	98	99	0.1	0.2	4.349	A
		2	1	(1, 2, 3, 4)	520			520	533	0.1	0.1	0.522	A
	Exit	1	1		192			192	198	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	54	904	0.060	54	55	0.0	0.1	4.288	A
			2	1, 2	48	904	0.053	48	54	0.0	0.1	3.933	A
		2	1	(1, 2, 3, 4)	102			102	110	0.0	0.0	0.000	A
	Exit	1	1		356			356	373	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	188	941	0.199	185	182	0.4	0.5	6.312	A
			2	2, 3	69	941	0.073	69	75	0.0	0.1	4.096	A
		2	1	(1, 2, 3, 4)	256			256	257	0.0	0.0	0.030	A
	Exit	1	1		150			150	150	0.0	0.0	0.000	A
4 - A42	Exit	1	1		179			179	176	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	508	944	0.538	509	512	0.9	1.2	8.244	A
			2	1, 4	117	944	0.124	117	120	0.2	0.2	4.902	A
		2	1	(1, 2, 3, 4)	626			626	633	0.1	0.3	1.284	A
	Exit	1	1		245			245	254	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	61	892	0.069	62	68	0.1	0.1	4.536	A
			2	1, 2	60	892	0.067	59	65	0.1	0.1	4.512	A
		2	1	(1, 2, 3, 4)	121			121	133	0.0	0.0	0.000	A
	Exit	1	1		447			447	453	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	231	930	0.249	232	241	0.5	0.4	7.029	A
			2	2, 3	91	930	0.098	92	94	0.1	0.1	4.456	A
		2	1	(1, 2, 3, 4)	322			322	334	0.0	0.0	0.037	A
	Exit	1	1		173			173	172	0.0	0.0	0.000	A
4 - A42	Exit	1	1		206			206	219	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	508	945	0.538	510	514	1.2	1.1	8.274	A
			2	1, 4	121	945	0.128	120	119	0.2	0.2	5.244	A
		2	1	(1, 2, 3, 4)	631			629	633	0.3	0.5	1.592	A
	Exit	1	1		247			247	246	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	63	892	0.070	62	67	0.1	0.1	4.938	A
			2	1, 2	55	892	0.062	56	65	0.1	0.1	4.416	A
		2	1	(1, 2, 3, 4)	118			118	132	0.0	0.0	0.000	A
	Exit	1	1		449			449	461	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	232	930	0.250	233	222	0.4	0.4	6.241	A
			2	2, 3	89	930	0.095	90	96	0.1	0.1	4.437	A
		2	1	(1, 2, 3, 4)	321			321	318	0.0	0.0	0.052	A
	Exit	1	1		169			169	168	0.0	0.0	0.000	A
4 - A42	Exit	1	1		206			206	209	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	415	950	0.437	421	430	1.1	0.4	7.083	A
			2	1, 4	92	950	0.096	91	101	0.2	0.2	4.830	A
		2	1	(1, 2, 3, 4)	506			507	528	0.5	0.0	0.810	A
	Exit	1	1		190			190	200	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	53	908	0.059	53	58	0.1	0.1	4.581	A
			2	1, 2	50	908	0.055	50	52	0.1	0.0	4.256	A
		2	1	(1, 2, 3, 4)	103			103	110	0.0	0.0	0.000	A
	Exit	1	1		367			367	379	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	176	943	0.187	176	183	0.4	0.2	6.514	A
			2	2, 3	74	943	0.079	74	78	0.1	0.1	4.393	A
		2	1	(1, 2, 3, 4)	250			250	260	0.0	0.0	0.015	A
	Exit	1	1		143			143	144	0.0	0.0	0.000	A
4 - A42	Exit	1	1		167			167	178	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	354	953	0.372	354	352	0.4	0.5	6.165	A
			2	1, 4	81	953	0.084	80	83	0.2	0.1	4.747	A
		2	1	(1, 2, 3, 4)	435			435	435	0.0	0.0	0.268	A
	Exit	1	1		160			160	169	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	38	923	0.042	38	46	0.1	0.0	4.477	A
			2	1, 2	46	923	0.050	46	47	0.0	0.1	4.293	A
		2	1	(1, 2, 3, 4)	84			84	93	0.0	0.0	0.000	A
	Exit	1	1		324			324	315	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	145	953	0.152	144	153	0.2	0.2	5.702	A
			2	2, 3	64	953	0.067	64	64	0.1	0.1	4.078	A
		2	1	(1, 2, 3, 4)	209			209	216	0.0	0.0	0.010	A
	Exit	1	1		108			108	115	0.0	0.0	0.000	A
4 - A42	Exit	1	1		134			134	146	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	234	59	973	953	0.246	233	245	0.0	0.4	5.997	A
				3	120	30	973	954	0.126	120	111	0.0	0.2	6.708	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	80	20	973	954	0.083	80	79	0.0	0.1	4.662	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	235	59	-	-	-	234	247	0.0	0.1	0.192	A
				3	120	30	-	-	-	120	112	0.0	0.0	0.249	A
				4	80	20	-	-	-	80	79	0.0	0.0	0.113	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	873	820	0.013	11	11	0.0	0.0	5.019	A
				4	27	7	978	915	0.029	26	30	0.0	0.0	4.761	A
			2	1	49	12	978	918	0.053	50	45	0.0	0.0	4.136	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	49	12	-	-	-	49	46	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	11	0.0	0.0	0.000	A
				4	27	7	-	-	-	27	30	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	125	31	1001	951	0.132	123	125	0.0	0.4	6.082	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	8	983	932	0.032	29	33	0.0	0.1	9.611	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	64	16	1001	951	0.067	64	67	0.0	0.0	3.963	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	125	31	-	-	-	125	127	0.0	0.0	0.023	A
				2	64	16	-	-	-	64	67	0.0	0.0	0.052	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	8	-	-	-	30	33	0.0	0.0	0.026	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	286	72	973	951	0.301	286	298	0.4	0.6	6.580	A
				3	135	34	973	950	0.142	136	135	0.2	0.3	7.736	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	99	25	973	950	0.104	98	99	0.1	0.2	4.349	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	287	72	-	-	-	286	299	0.1	0.1	0.601	A
				3	135	34	-	-	-	135	136	0.0	0.0	0.449	A
				4	99	25	-	-	-	99	99	0.0	0.0	0.342	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	925	859	0.016	14	15	0.0	0.0	4.500	A
				4	40	10	978	905	0.044	39	40	0.0	0.1	4.209	A
			2	1	48	12	978	906	0.053	48	54	0.0	0.1	3.933	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	48	12	-	-	-	48	55	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	-	-	-	14	15	0.0	0.0	0.000	A
				4	40	10	-	-	-	40	40	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	145	36	1001	941	0.154	144	144	0.4	0.3	5.849	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	42	11	1001	941	0.045	42	38	0.1	0.2	9.096	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	1001	941	0.073	69	75	0.0	0.1	4.096	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	145	36	-	-	-	145	144	0.0	0.0	0.045	A
				2	69	17	-	-	-	69	75	0.0	0.0	0.004	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	42	11	-	-	-	42	38	0.0	0.0	0.045	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	355	89	973	944	0.376	355	360	0.6	0.8	7.979	A
				3	153	38	973	944	0.163	154	152	0.3	0.4	9.048	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	117	29	973	944	0.124	117	120	0.2	0.2	4.902	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	354	89	-	-	-	355	361	0.1	0.2	1.339	A
				3	154	39	-	-	-	153	152	0.0	0.1	1.289	A
				4	118	29	-	-	-	117	120	0.0	0.1	1.094	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	978	894	0.021	18	20	0.0	0.1	4.299	A
				4	43	11	978	891	0.048	43	48	0.1	0.1	4.634	A
			2	1	60	15	978	897	0.067	59	65	0.1	0.1	4.512	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	60	15	-	-	-	60	65	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	-	-	-	18	20	0.0	0.0	0.000	A
				4	43	11	-	-	-	43	48	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	186	47	1001	931	0.200	186	189	0.3	0.3	6.537	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	45	11	1001	932	0.048	46	51	0.2	0.0	9.947	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	91	23	1001	931	0.098	92	94	0.1	0.1	4.456	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	186	47	-	-	-	186	189	0.0	0.0	0.049	A
				2	91	23	-	-	-	91	94	0.0	0.0	0.016	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	45	11	-	-	-	45	51	0.0	0.0	0.039	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	358	90	973	944	0.379	359	365	0.8	0.7	8.000	A
				3	150	37	973	944	0.159	150	149	0.4	0.4	9.113	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	121	30	973	945	0.128	120	119	0.2	0.2	5.244	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	358	90	-	-	-	358	364	0.2	0.2	1.598	A
				3	150	38	-	-	-	150	149	0.1	0.1	1.764	A
				4	123	31	-	-	-	121	120	0.1	0.1	1.379	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	925	846	0.023	18	18	0.1	0.0	5.134	A
				4	44	11	978	895	0.049	44	48	0.1	0.1	4.863	A
			2	1	55	14	978	892	0.062	56	65	0.1	0.1	4.416	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	55	14	-	-	-	55	65	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	-	-	-	19	18	0.0	0.0	0.000	A
				4	44	11	-	-	-	44	48	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	191	48	1001	931	0.205	191	180	0.3	0.3	5.960	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	42	10	1001	929	0.045	42	42	0.0	0.0	8.191	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	89	22	1001	930	0.095	90	96	0.1	0.1	4.437	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	191	48	-	-	-	191	180	0.0	0.0	0.066	A
				2	89	22	-	-	-	89	96	0.0	0.0	0.027	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	42	10	-	-	-	42	42	0.0	0.0	0.076	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	290	73	973	950	0.306	293	302	0.7	0.3	6.735	A
				3	125	31	973	950	0.132	128	128	0.4	0.1	8.153	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	92	23	973	951	0.096	91	101	0.2	0.2	4.830	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	290	73	-	-	-	290	300	0.2	0.0	0.811	A
				3	125	31	-	-	-	125	127	0.1	0.0	1.021	A
				4	91	23	-	-	-	92	101	0.1	0.0	0.581	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	943	873	0.018	16	17	0.0	0.0	4.647	A
				4	38	9	978	903	0.042	38	41	0.1	0.1	4.555	A
			2	1	50	12	978	908	0.055	50	52	0.1	0.0	4.256	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	50	12	-	-	-	50	52	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	-	-	-	16	17	0.0	0.0	0.000	A
				4	38	9	-	-	-	38	41	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	140	35	1001	943	0.148	140	148	0.3	0.2	6.111	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	1001	940	0.039	37	35	0.0	0.0	9.210	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	74	19	1001	942	0.079	74	78	0.1	0.1	4.393	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	140	35	-	-	-	140	147	0.0	0.0	0.024	A
				2	74	19	-	-	-	74	78	0.0	0.0	0.003	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	-	-	-	36	35	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	260	65	973	953	0.273	260	252	0.3	0.3	5.794	A
				3	94	23	973	953	0.099	94	101	0.1	0.2	7.348	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	81	20	973	953	0.084	80	83	0.2	0.1	4.747	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	260	65	-	-	-	260	252	0.0	0.0	0.266	A
				3	94	23	-	-	-	94	101	0.0	0.0	0.288	A
				4	81	20	-	-	-	81	82	0.0	0.0	0.253	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	908	853	0.016	14	14	0.0	0.0	4.470	A
				4	24	6	978	922	0.026	24	32	0.1	0.0	4.479	A
			2	1	46	12	978	923	0.050	46	47	0.0	0.1	4.293	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	46	12	-	-	-	46	47	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	-	-	-	14	14	0.0	0.0	0.000	A
				4	24	6	-	-	-	24	32	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	115	29	1001	953	0.120	114	122	0.2	0.2	5.398	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	8	965	919	0.033	30	31	0.0	0.1	7.607	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	64	16	1001	953	0.067	64	64	0.1	0.1	4.078	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	115	29	-	-	-	115	122	0.0	0.0	0.014	A
				2	64	16	-	-	-	64	64	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	8	-	-	-	30	31	0.0	0.0	0.025	A

2028 | WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.50	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.50	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2028	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	404	100.000
2 - Gelscoe Lane		ONE HOUR	✓	194	100.000
3 - Top Brand		ONE HOUR	✓	100	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	173	107	124
	2 - Gelscoe Lane	26	0	70	98
	3 - Top Brand	26	70	0	4
	4 - A42	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	15	46	47
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	8	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A453 (N)	0.35	7.74	1.2	A	373	560
2 - Gelscoe Lane	0.21	5.02	0.4	A	179	269
3 - Top Brand	0.09	4.37	0.2	A	94	140
4 - A42						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	306	76	51	1253	0.244	306	297	43	0.0	0.5	6.078	A
2 - Gelscoe Lane	150	37	178	1052	0.142	149	148	179	0.0	0.3	4.501	A
3 - Top Brand	78	20	194	1284	0.061	78	75	134	0.0	0.1	4.373	A
4 - A42			0					176				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	376	94	59	1337	0.281	371	386	43	0.5	1.0	6.581	A
2 - Gelscoe Lane	179	45	211	1072	0.167	179	178	219	0.3	0.2	4.653	A
3 - Top Brand	83	21	227	1314	0.063	83	94	162	0.1	0.1	4.328	A
4 - A42			0					208				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	457	114	79	1304	0.350	454	455	63	1.0	1.2	7.743	A
2 - Gelscoe Lane	208	52	255	1099	0.189	209	224	278	0.2	0.3	4.868	A
3 - Top Brand	114	29	275	1293	0.088	113	119	189	0.1	0.2	4.341	A
4 - A42			0					247				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	447	112	82	1296	0.345	448	448	61	1.2	1.1	7.653	A
2 - Gelscoe Lane	214	54	251	1026	0.209	213	222	278	0.3	0.4	5.016	A
3 - Top Brand	113	28	273	1261	0.090	114	118	190	0.2	0.1	4.353	A
4 - A42			0					245				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	354	89	65	1295	0.273	352	367	51	1.1	0.8	6.639	A
2 - Gelscoe Lane	170	42	205	1050	0.162	171	178	212	0.4	0.2	4.783	A
3 - Top Brand	96	24	214	1275	0.075	96	100	162	0.1	0.1	4.177	A
4 - A42			0					194				

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	301	75	54	1260	0.239	298	306	42	0.8	0.7	6.106	A
2 - Gelscoe Lane	154	39	174	1082	0.143	154	153	178	0.2	0.1	4.441	A
3 - Top Brand	77	19	193	1330	0.058	76	81	135	0.1	0.1	4.067	A
4 - A42			0					173				

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	210	957	0.220	210	209	0.0	0.3	6.057	A
			2	1, 4	97	957	0.101	96	88	0.0	0.2	5.877	A
		2	1	(1, 2, 3, 4)	306			306	299	0.0	0.0	0.070	A
	Exit	1	1		43			43	40	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	129	921	0.140	128	127	0.0	0.2	4.558	A
			2	1, 2	21	921	0.023	21	20	0.0	0.0	4.146	A
		2	1	(1, 2, 3, 4)	150			150	149	0.0	0.0	0.000	A
	Exit	1	1		179			179	182	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	27	939	0.028	26	22	0.0	0.0	4.775	A
			2	2, 3	52	939	0.055	51	52	0.0	0.1	4.211	A
		2	1	(1, 2, 3, 4)	78			78	75	0.0	0.0	0.000	A
	Exit	1	1		134			134	131	0.0	0.0	0.000	A
4 - A42	Exit	1	1		176			176	168	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	259	955	0.271	257	269	0.3	0.6	6.306	A
			2	1, 4	115	955	0.121	113	117	0.2	0.3	6.235	A
		2	1	(1, 2, 3, 4)	376			375	388	0.0	0.1	0.291	A
	Exit	1	1		43			43	48	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	155	911	0.170	155	153	0.2	0.1	4.743	A
			2	1, 2	24	911	0.026	24	25	0.0	0.0	4.105	A
		2	1	(1, 2, 3, 4)	179			179	178	0.0	0.0	0.000	A
	Exit	1	1		219			219	232	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	25	928	0.026	25	28	0.0	0.1	4.202	A
			2	2, 3	59	928	0.063	59	67	0.1	0.0	4.378	A
		2	1	(1, 2, 3, 4)	83			83	94	0.0	0.0	0.000	A
	Exit	1	1		162			162	165	0.0	0.0	0.000	A
4 - A42	Exit	1	1		208			208	213	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	320	948	0.337	316	309	0.6	0.9	7.308	A
			2	1, 4	137	948	0.145	137	146	0.3	0.3	6.711	A
		2	1	(1, 2, 3, 4)	457			457	456	0.1	0.0	0.604	A
	Exit	1	1		63			63	64	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	175	897	0.196	176	191	0.1	0.2	4.989	A
			2	1, 2	32	897	0.036	33	33	0.0	0.0	4.167	A
		2	1	(1, 2, 3, 4)	208			208	224	0.0	0.0	0.000	A
	Exit	1	1		278			278	274	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	35	912	0.039	34	35	0.1	0.1	4.060	A
			2	2, 3	79	912	0.086	79	84	0.0	0.1	4.449	A
		2	1	(1, 2, 3, 4)	114			114	119	0.0	0.0	0.000	A
	Exit	1	1		189			189	196	0.0	0.0	0.000	A
4 - A42	Exit	1	1		247			247	264	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	317	947	0.335	315	312	0.9	0.8	7.149	A
			2	1, 4	131	947	0.138	132	136	0.3	0.3	6.804	A
		2	1	(1, 2, 3, 4)	447			449	448	0.0	0.0	0.600	A
	Exit	1	1		61			61	61	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	182	898	0.203	181	191	0.2	0.4	5.176	A
			2	1, 2	32	898	0.036	32	31	0.0	0.0	4.023	A
		2	1	(1, 2, 3, 4)	214			214	222	0.0	0.0	0.000	A
	Exit	1	1		278			278	276	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	32	913	0.035	33	35	0.1	0.0	4.405	A
			2	2, 3	81	913	0.089	82	83	0.1	0.1	4.334	A
		2	1	(1, 2, 3, 4)	113			113	117	0.0	0.0	0.000	A
	Exit	1	1		190			190	197	0.0	0.0	0.000	A
4 - A42	Exit	1	1		245			245	253	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	246	952	0.259	245	260	0.8	0.5	6.499	A
			2	1, 4	108	952	0.113	106	107	0.3	0.3	6.205	A
		2	1	(1, 2, 3, 4)	354			354	366	0.0	0.0	0.220	A
	Exit	1	1		51			51	49	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	146	913	0.159	147	154	0.4	0.2	4.961	A
			2	1, 2	24	913	0.026	24	24	0.0	0.0	3.627	A
		2	1	(1, 2, 3, 4)	170			170	177	0.0	0.0	0.000	A
	Exit	1	1		212			212	233	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	31	932	0.034	31	29	0.0	0.0	4.181	A
			2	2, 3	65	932	0.069	65	71	0.1	0.1	4.176	A
		2	1	(1, 2, 3, 4)	96			96	100	0.0	0.0	0.000	A
	Exit	1	1		162			162	164	0.0	0.0	0.000	A
4 - A42	Exit	1	1		194			194	198	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	206	956	0.215	204	212	0.5	0.5	5.919	A
			2	1, 4	94	956	0.099	95	94	0.3	0.1	6.035	A
		2	1	(1, 2, 3, 4)	301			300	306	0.0	0.1	0.159	A
	Exit	1	1		42			42	40	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	132	923	0.143	132	133	0.2	0.1	4.512	A
			2	1, 2	22	923	0.024	22	20	0.0	0.0	3.970	A
		2	1	(1, 2, 3, 4)	154			154	153	0.0	0.0	0.000	A
	Exit	1	1		178			178	186	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	23	939	0.024	23	24	0.0	0.1	4.348	A
			2	2, 3	54	939	0.058	54	57	0.1	0.0	3.956	A
		2	1	(1, 2, 3, 4)	77			77	81	0.0	0.0	0.000	A
	Exit	1	1		135			135	142	0.0	0.0	0.000	A
4 - A42	Exit	1	1		173			173	172	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	973	957	0.133	127	130	0.0	0.2	5.542	A
				3	82	21	973	957	0.086	83	79	0.0	0.1	7.107	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	97	24	973	957	0.101	96	88	0.0	0.2	5.877	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	-	-	-	127	130	0.0	0.0	0.081	A
				3	82	20	-	-	-	82	80	0.0	0.0	0.111	A
				4	97	24	-	-	-	97	89	0.0	0.0	0.012	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	51	13	978	923	0.056	52	51	0.0	0.1	4.579	A
				4	77	19	978	921	0.084	77	76	0.0	0.1	4.543	A
			2	1	21	5	964	908	0.023	21	20	0.0	0.0	4.146	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	21	5	-	-	-	21	21	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	51	13	-	-	-	51	52	0.0	0.0	0.000	A
				4	77	19	-	-	-	77	77	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	23	6	986	926	0.024	22	19	0.0	0.0	4.816	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	545	512	0.008	4	3	0.0	0.0	4.530	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	1001	937	0.055	51	52	0.0	0.1	4.211	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	23	6	-	-	-	23	20	0.0	0.0	0.000	A
				2	52	13	-	-	-	52	52	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	-	-	-	4	3	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	159	40	973	954	0.166	160	166	0.2	0.3	5.966	A
				3	100	25	973	954	0.105	97	103	0.1	0.4	7.008	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	115	29	973	954	0.121	113	117	0.2	0.3	6.235	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	159	40	-	-	-	159	166	0.0	0.0	0.252	A
				3	100	25	-	-	-	100	104	0.0	0.0	0.420	A
				4	116	29	-	-	-	115	117	0.0	0.0	0.249	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	64	16	978	911	0.071	65	62	0.1	0.1	4.686	A
				4	91	23	978	911	0.100	91	91	0.1	0.1	4.782	A
			2	1	24	6	978	911	0.026	24	25	0.0	0.0	4.105	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	24	6	-	-	-	24	25	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	64	16	-	-	-	64	62	0.0	0.0	0.000	A
				4	91	23	-	-	-	91	91	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	20	5	1001	927	0.021	20	23	0.0	0.0	4.292	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	5	1	692	639	0.007	5	5	0.0	0.0	3.779	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	1001	927	0.063	59	67	0.1	0.0	4.378	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	20	5	-	-	-	20	23	0.0	0.0	0.000	A
				2	59	15	-	-	-	59	66	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	5	1	-	-	-	5	5	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	201	50	973	948	0.212	199	190	0.3	0.5	6.769	A
				3	119	30	973	947	0.126	118	119	0.4	0.4	8.412	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	137	34	973	947	0.145	137	146	0.3	0.3	6.711	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	201	50	-	-	-	201	191	0.0	0.0	0.577	A
				3	119	30	-	-	-	119	119	0.0	0.0	0.812	A
				4	137	34	-	-	-	137	146	0.0	0.0	0.477	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	70	17	978	895	0.078	70	77	0.1	0.1	4.925	A
				4	106	26	978	896	0.118	106	114	0.1	0.2	5.031	A
			2	1	32	8	978	892	0.036	33	33	0.0	0.0	4.167	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	32	8	-	-	-	32	33	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	70	17	-	-	-	70	77	0.0	0.0	0.000	A
				4	106	26	-	-	-	106	115	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	31	8	1001	910	0.035	31	31	0.0	0.1	4.164	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	0.97	618	560	0.007	4	4	0.0	0.0	3.331	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	79	20	1001	911	0.086	79	84	0.0	0.1	4.449	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	31	8	-	-	-	31	31	0.0	0.0	0.000	A
				2	79	20	-	-	-	79	84	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	0.97	-	-	-	4	4	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	196	49	973	947	0.207	197	193	0.5	0.4	6.807	A
				3	121	30	973	947	0.128	119	119	0.4	0.4	7.846	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	131	33	973	947	0.138	132	136	0.3	0.3	6.804	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	196	49	-	-	-	196	193	0.0	0.0	0.634	A
				3	120	30	-	-	-	121	119	0.0	0.0	0.756	A
				4	131	33	-	-	-	131	136	0.0	0.0	0.401	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	71	18	978	898	0.079	72	78	0.1	0.1	5.174	A
				4	111	28	978	899	0.123	109	113	0.2	0.3	5.177	A
			2	1	32	8	978	899	0.036	32	31	0.0	0.0	4.023	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	32	8	-	-	-	32	31	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	71	18	-	-	-	71	78	0.0	0.0	0.000	A
				4	111	28	-	-	-	111	114	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	28	7	1001	913	0.031	29	30	0.1	0.0	4.537	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	648	586	0.007	4	4	0.0	0.0	3.546	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	81	20	1001	914	0.089	82	83	0.1	0.1	4.334	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	28	7	-	-	-	28	30	0.0	0.0	0.000	A
				2	81	20	-	-	-	81	83	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	-	-	-	4	4	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	973	953	0.156	147	162	0.4	0.4	6.184	A
				3	98	25	973	953	0.103	99	97	0.4	0.1	7.165	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	108	27	973	954	0.113	106	107	0.3	0.3	6.205	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	-	-	-	149	162	0.0	0.0	0.235	A
				3	98	24	-	-	-	98	96	0.0	0.0	0.183	A
				4	108	27	-	-	-	108	107	0.0	0.0	0.223	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	62	16	978	914	0.068	63	67	0.1	0.1	4.947	A
				4	83	21	978	913	0.091	84	87	0.3	0.1	4.972	A
			2	1	24	6	964	901	0.027	24	24	0.0	0.0	3.627	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	24	6	-	-	-	24	24	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	62	16	-	-	-	62	67	0.0	0.0	0.000	A
				4	83	21	-	-	-	83	87	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	28	7	1001	934	0.030	27	25	0.0	0.0	4.198	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	0.93	603	558	0.007	4	4	0.0	0.0	4.065	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	65	16	1001	933	0.069	65	71	0.1	0.1	4.176	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	28	7	-	-	-	28	25	0.0	0.0	0.000	A
				2	65	16	-	-	-	65	71	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	0.93	-	-	-	4	4	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	125	31	973	956	0.130	124	128	0.4	0.3	5.437	A
				3	81	20	973	956	0.085	80	83	0.1	0.3	6.854	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	94	24	973	956	0.099	95	94	0.3	0.1	6.035	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	125	31	-	-	-	125	128	0.0	0.1	0.130	A
				3	81	20	-	-	-	81	84	0.0	0.0	0.278	A
				4	94	24	-	-	-	94	94	0.0	0.0	0.101	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	55	14	978	923	0.059	55	59	0.1	0.0	4.679	A
				4	77	19	978	922	0.084	76	74	0.1	0.1	4.379	A
			2	1	22	5	964	909	0.024	22	20	0.0	0.0	3.970	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	22	5	-	-	-	22	20	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	55	14	-	-	-	55	59	0.0	0.0	0.000	A
				4	77	19	-	-	-	77	74	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	20	5	1001	942	0.022	20	21	0.0	0.0	4.410	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.66	545	511	0.005	2	3	0.0	0.0	3.983	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	54	14	1001	939	0.058	54	57	0.1	0.0	3.956	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	20	5	-	-	-	20	21	0.0	0.0	0.000	A
				2	54	14	-	-	-	54	57	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.66	-	-	-	3	3	0.0	0.0	0.000	A

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.62	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.62	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2038	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	487	100.000
2 - Gelscoe Lane		ONE HOUR	✓	196	100.000
3 - Top Brand		ONE HOUR	✓	388	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	152	179	156
	2 - Gelscoe Lane	79	0	37	80
	3 - Top Brand	271	73	0	44
	4 - A42	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	1	15	9
	2 - Gelscoe Lane	0	0	3	3
	3 - Top Brand	12	0	0	83
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A453 (N)	0.40	6.37	1.0	A	449	674
2 - Gelscoe Lane	0.16	4.95	0.4	A	177	266
3 - Top Brand	0.40	7.75	1.2	A	356	535
4 - A42						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	365	91	54	1341	0.272	364	364	256	0.0	0.5	5.242	A
2 - Gelscoe Lane	142	35	250	1388	0.102	142	148	168	0.0	0.1	4.487	A
3 - Top Brand	293	73	242	1165	0.251	289	290	150	0.0	0.7	5.972	A
4 - A42			0					221				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	454	113	70	1386	0.327	450	450	316	0.5	0.9	5.959	A
2 - Gelscoe Lane	175	44	302	1392	0.126	175	185	218	0.1	0.2	4.765	A
3 - Top Brand	351	88	287	1080	0.325	354	355	191	0.7	0.5	6.559	A
4 - A42			0					255				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	536	134	78	1334	0.401	540	550	394	0.9	0.8	6.365	A
2 - Gelscoe Lane	218	54	376	1356	0.160	216	222	242	0.2	0.4	4.865	A
3 - Top Brand	431	108	350	1087	0.396	430	432	242	0.5	1.1	7.554	A
4 - A42			0					308				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	531	133	82	1375	0.386	530	540	371	0.8	1.0	6.374	A
2 - Gelscoe Lane	212	53	369	1358	0.156	212	216	242	0.4	0.3	4.945	A
3 - Top Brand	417	104	351	1060	0.393	414	428	230	1.1	1.2	7.754	A
4 - A42			0					313				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	444	111	67	1356	0.327	445	443	312	1.0	0.6	5.720	A
2 - Gelscoe Lane	173	43	310	1430	0.121	173	185	202	0.3	0.2	4.825	A
3 - Top Brand	347	87	273	1106	0.313	347	354	210	1.2	0.6	6.912	A
4 - A42			0					242				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	367	92	58	1345	0.273	367	371	271	0.6	0.6	5.427	A
2 - Gelscoe Lane	145	36	251	1430	0.101	146	153	174	0.2	0.1	4.461	A
3 - Top Brand	301	75	225	1168	0.258	300	301	171	0.6	0.6	6.041	A
4 - A42			0					196				

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	239	956	0.250	239	246	0.0	0.3	5.496	A
			2	1, 4	126	956	0.132	125	118	0.0	0.2	4.571	A
		2	1	(1, 2, 3, 4)	365			365	366	0.0	0.0	0.042	A
	Exit	1	1		256			256	261	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	86	898	0.096	86	89	0.0	0.1	4.688	A
			2	1, 2	56	898	0.062	56	59	0.0	0.0	4.197	A
		2	1	(1, 2, 3, 4)	142			142	149	0.0	0.0	0.000	A
	Exit	1	1		168			168	170	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	239	923	0.259	235	235	0.0	0.6	6.378	A
			2	2, 3	54	923	0.058	54	55	0.0	0.0	4.329	A
		2	1	(1, 2, 3, 4)	293			293	293	0.0	0.0	0.034	A
	Exit	1	1		150			150	160	0.0	0.0	0.000	A
4 - A42	Exit	1	1		221			221	211	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	310	951	0.326	308	305	0.3	0.7	6.108	A
			2	1, 4	143	951	0.150	142	145	0.2	0.2	5.102	A
		2	1	(1, 2, 3, 4)	454			453	451	0.0	0.0	0.172	A
	Exit	1	1		316			316	325	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	102	882	0.115	102	109	0.1	0.1	4.999	A
			2	1, 2	73	882	0.083	74	76	0.0	0.1	4.438	A
		2	1	(1, 2, 3, 4)	175			175	185	0.0	0.0	0.000	A
	Exit	1	1		218			218	209	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	281	909	0.309	284	287	0.6	0.5	6.997	A
			2	2, 3	70	909	0.077	70	68	0.0	0.0	4.395	A
		2	1	(1, 2, 3, 4)	351			351	354	0.0	0.0	0.130	A
	Exit	1	1		191			191	196	0.0	0.0	0.000	A
4 - A42	Exit	1	1		255			255	258	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	363	948	0.383	365	373	0.7	0.6	6.525	A
			2	1, 4	172	948	0.182	176	176	0.2	0.1	5.074	A
		2	1	(1, 2, 3, 4)	536			535	550	0.0	0.1	0.300	A
	Exit	1	1		394			394	393	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	129	859	0.151	128	132	0.1	0.2	4.945	A
			2	1, 2	88	859	0.103	88	90	0.1	0.1	4.738	A
		2	1	(1, 2, 3, 4)	218			218	222	0.0	0.0	0.005	A
	Exit	1	1		242			242	251	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	353	888	0.398	352	351	0.5	1.0	8.023	A
			2	2, 3	78	888	0.087	78	81	0.0	0.1	4.505	A
		2	1	(1, 2, 3, 4)	431			431	434	0.0	0.0	0.282	A
	Exit	1	1		242			242	245	0.0	0.0	0.000	A
4 - A42	Exit	1	1		308			308	315	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	353	947	0.373	353	363	0.6	0.8	6.579	A
			2	1, 4	177	947	0.187	177	177	0.1	0.3	5.221	A
		2	1	(1, 2, 3, 4)	531			531	541	0.1	0.0	0.239	A
	Exit	1	1		371			371	386	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	128	861	0.149	128	128	0.2	0.2	5.237	A
			2	1, 2	84	861	0.098	84	89	0.1	0.1	4.531	A
		2	1	(1, 2, 3, 4)	212			212	216	0.0	0.0	0.002	A
	Exit	1	1		242			242	246	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	333	888	0.375	333	346	1.0	1.0	8.282	A
			2	2, 3	84	888	0.094	82	82	0.1	0.2	4.614	A
		2	1	(1, 2, 3, 4)	417			417	428	0.0	0.1	0.274	A
	Exit	1	1		230			230	238	0.0	0.0	0.000	A
4 - A42	Exit	1	1		313			313	313	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	308	952	0.324	310	305	0.8	0.5	5.969	A
			2	1, 4	135	952	0.142	135	138	0.3	0.1	4.739	A
		2	1	(1, 2, 3, 4)	444			444	441	0.0	0.0	0.133	A
	Exit	1	1		312			312	321	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	106	879	0.120	106	111	0.2	0.2	4.956	A
			2	1, 2	67	879	0.076	67	74	0.1	0.1	4.629	A
		2	1	(1, 2, 3, 4)	173			173	185	0.0	0.0	0.002	A
	Exit	1	1		202			202	206	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	280	913	0.307	280	285	1.0	0.6	7.416	A
			2	2, 3	67	913	0.074	67	69	0.2	0.1	4.388	A
		2	1	(1, 2, 3, 4)	347			347	352	0.1	0.0	0.176	A
	Exit	1	1		210			210	204	0.0	0.0	0.000	A
4 - A42	Exit	1	1		242			242	251	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	257	955	0.269	256	254	0.5	0.4	5.660	A
			2	1, 4	111	955	0.116	110	117	0.1	0.2	4.711	A
		2	1	(1, 2, 3, 4)	367			367	371	0.0	0.0	0.065	A
	Exit	1	1		271			271	270	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	85	898	0.095	85	90	0.2	0.1	4.550	A
			2	1, 2	60	898	0.067	61	62	0.1	0.0	4.335	A
		2	1	(1, 2, 3, 4)	145			145	152	0.0	0.0	0.000	A
	Exit	1	1		174			174	173	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	243	928	0.262	242	242	0.6	0.5	6.483	A
			2	2, 3	58	928	0.062	58	59	0.1	0.1	4.053	A
		2	1	(1, 2, 3, 4)	301			301	301	0.0	0.0	0.102	A
	Exit	1	1		171			171	171	0.0	0.0	0.000	A
4 - A42	Exit	1	1		196			196	212	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	114	29	973	956	0.119	114	115	0.0	0.1	5.223	A
				3	125	31	973	956	0.130	125	131	0.0	0.2	5.769	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	126	31	973	956	0.132	125	118	0.0	0.2	4.571	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	114	29	-	-	-	114	116	0.0	0.0	0.034	A
				3	125	31	-	-	-	125	132	0.0	0.0	0.059	A
				4	126	31	-	-	-	126	118	0.0	0.0	0.034	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	6	978	900	0.029	26	29	0.0	0.1	4.871	A
				4	60	15	978	900	0.067	61	60	0.0	0.0	4.599	A
			2	1	56	14	978	900	0.062	56	59	0.0	0.0	4.197	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	56	14	-	-	-	56	60	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	6	-	-	-	26	29	0.0	0.0	0.000	A
				4	60	15	-	-	-	60	60	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	203	51	1001	923	0.220	200	202	0.0	0.5	6.090	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	991	917	0.039	35	33	0.0	0.1	9.245	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	54	13	1001	925	0.058	54	55	0.0	0.0	4.329	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	203	51	-	-	-	203	204	0.0	0.0	0.048	A
				2	54	13	-	-	-	54	55	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	-	-	-	36	34	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	148	37	973	951	0.156	148	142	0.1	0.3	5.788	A
				3	162	40	973	951	0.170	160	163	0.2	0.4	6.426	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	143	36	973	951	0.150	142	145	0.2	0.2	5.102	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	-	-	-	148	142	0.0	0.0	0.202	A
				3	162	40	-	-	-	162	164	0.0	0.0	0.203	A
				4	143	36	-	-	-	143	145	0.0	0.0	0.107	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	31	8	978	881	0.035	30	33	0.1	0.0	5.029	A
				4	71	18	978	881	0.081	71	76	0.0	0.1	4.986	A
			2	1	73	18	978	881	0.083	74	76	0.0	0.1	4.438	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	73	18	-	-	-	73	76	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	31	8	-	-	-	31	33	0.0	0.0	0.000	A
				4	71	18	-	-	-	71	76	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	240	60	1001	908	0.264	242	250	0.5	0.4	6.777	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	41	10	1001	909	0.046	41	38	0.1	0.1	9.384	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	70	17	1001	909	0.077	70	68	0.0	0.0	4.395	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	240	60	-	-	-	240	249	0.0	0.0	0.154	A
				2	70	17	-	-	-	70	68	0.0	0.0	0.060	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	41	10	-	-	-	41	38	0.0	0.0	0.109	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	162	41	973	948	0.171	164	170	0.3	0.2	6.100	A
				3	200	50	973	949	0.211	200	203	0.4	0.4	6.932	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	172	43	973	949	0.182	176	176	0.2	0.1	5.074	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	162	41	-	-	-	162	170	0.0	0.0	0.331	A
				3	201	50	-	-	-	200	203	0.0	0.0	0.386	A
				4	172	43	-	-	-	172	176	0.0	0.0	0.174	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	42	10	978	858	0.049	41	41	0.0	0.1	4.989	A
				4	88	22	978	859	0.102	87	91	0.1	0.2	4.925	A
			2	1	88	22	978	856	0.103	88	90	0.1	0.1	4.738	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	88	22	-	-	-	88	90	0.0	0.0	0.004	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	42	10	-	-	-	42	42	0.0	0.0	0.000	A
				4	88	22	-	-	-	88	91	0.0	0.0	0.009	A
3 - Top Brand	Entry	1	1	1	306	77	1001	888	0.345	306	303	0.4	0.7	7.762	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	47	12	1001	890	0.053	46	48	0.1	0.3	10.698	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	78	19	1001	890	0.087	78	81	0.0	0.1	4.505	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	306	77	-	-	-	306	305	0.0	0.0	0.328	A
				2	77	19	-	-	-	78	81	0.0	0.0	0.119	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	47	12	-	-	-	47	48	0.0	0.0	0.306	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	160	40	973	947	0.169	161	165	0.2	0.3	6.371	A
				3	193	48	973	947	0.204	192	198	0.4	0.4	6.776	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	177	44	973	947	0.187	177	177	0.1	0.3	5.221	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	160	40	-	-	-	160	165	0.0	0.0	0.283	A
				3	193	48	-	-	-	193	198	0.0	0.0	0.266	A
				4	177	44	-	-	-	177	178	0.0	0.0	0.167	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	39	10	978	859	0.045	38	40	0.1	0.1	5.213	A
				4	89	22	978	860	0.104	90	87	0.2	0.1	5.249	A
			2	1	84	21	978	859	0.098	84	89	0.1	0.1	4.531	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	84	21	-	-	-	84	88	0.0	0.0	0.001	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	39	10	-	-	-	39	40	0.0	0.0	0.008	A
				4	89	22	-	-	-	89	87	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	289	72	1001	888	0.326	287	298	0.7	0.8	8.007	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	44	11	1001	890	0.050	46	48	0.3	0.1	11.075	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	84	21	1001	888	0.094	82	82	0.1	0.2	4.614	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	289	72	-	-	-	289	298	0.0	0.0	0.301	A
				2	84	21	-	-	-	84	82	0.0	0.0	0.180	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	43	11	-	-	-	44	48	0.0	0.0	0.284	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	133	33	973	951	0.140	135	137	0.3	0.1	5.738	A
				3	175	44	973	952	0.184	175	168	0.4	0.3	6.184	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	135	34	973	952	0.142	135	138	0.3	0.1	4.739	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	133	33	-	-	-	133	136	0.0	0.0	0.138	A
				3	175	44	-	-	-	175	168	0.0	0.0	0.171	A
				4	135	34	-	-	-	135	137	0.0	0.0	0.085	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	978	881	0.040	35	36	0.1	0.1	5.202	A
				4	70	18	978	880	0.080	71	75	0.1	0.1	4.839	A
			2	1	67	17	978	881	0.076	67	74	0.1	0.1	4.629	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	67	17	-	-	-	67	74	0.0	0.0	0.002	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	-	-	-	35	36	0.0	0.0	0.000	A
				4	70	18	-	-	-	70	75	0.0	0.0	0.003	A
3 - Top Brand	Entry	1	1	1	245	61	1001	913	0.268	245	247	0.8	0.5	7.169	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	1001	910	0.039	36	38	0.1	0.1	10.047	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	67	17	1001	912	0.074	67	69	0.2	0.1	4.388	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	244	61	-	-	-	245	246	0.0	0.0	0.204	A
				2	67	17	-	-	-	67	69	0.0	0.0	0.097	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	-	-	-	36	38	0.0	0.0	0.139	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	115	29	973	955	0.121	116	114	0.1	0.1	5.360	A
				3	141	35	973	955	0.148	141	140	0.3	0.3	5.944	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	111	28	973	955	0.116	110	117	0.1	0.2	4.711	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	115	29	-	-	-	115	114	0.0	0.0	0.101	A
				3	141	35	-	-	-	141	140	0.0	0.0	0.057	A
				4	111	28	-	-	-	111	117	0.0	0.0	0.036	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	8	978	897	0.034	30	31	0.1	0.0	4.570	A
				4	55	14	978	899	0.061	55	59	0.1	0.1	4.540	A
			2	1	60	15	978	899	0.067	61	62	0.1	0.0	4.335	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	60	15	-	-	-	60	62	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	8	-	-	-	30	31	0.0	0.0	0.000	A
				4	55	14	-	-	-	55	59	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	211	53	1001	928	0.227	211	207	0.5	0.4	6.226	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	981	911	0.035	31	35	0.1	0.1	9.043	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	58	14	1001	927	0.063	58	59	0.1	0.1	4.053	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	211	53	-	-	-	211	207	0.0	0.0	0.111	A
				2	58	14	-	-	-	58	59	0.0	0.0	0.067	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	-	-	-	32	35	0.0	0.0	0.118	A

2038 | WoD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.28	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.28	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2038	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	457	100.000
2 - Gelscoe Lane		ONE HOUR	✓	213	100.000
3 - Top Brand		ONE HOUR	✓	221	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	90	191	176
	2 - Gelscoe Lane	74	0	64	75
	3 - Top Brand	165	48	0	8
	4 - A42	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	26	32	39
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	1	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A453 (N)	0.35	7.45	1.3	A	419	629
2 - Gelscoe Lane	0.19	5.02	0.4	A	196	293
3 - Top Brand	0.22	5.06	0.3	A	203	304
4 - A42						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	343	86	38	1466	0.234	341	338	172	0.0	0.7	6.423	A
2 - Gelscoe Lane	153	38	273	1314	0.117	152	160	106	0.0	0.2	4.480	A
3 - Top Brand	165	41	240	1202	0.137	166	166	185	0.0	0.2	4.361	A
4 - A42			0					195				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	413	103	48	1382	0.299	412	415	210	0.7	0.8	6.482	A
2 - Gelscoe Lane	187	47	332	1298	0.144	188	196	128	0.2	0.3	4.653	A
3 - Top Brand	197	49	300	1151	0.171	199	202	220	0.2	0.2	4.777	A
4 - A42			0					241				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	510	127	52	1450	0.351	508	511	264	0.8	1.1	7.453	A
2 - Gelscoe Lane	237	59	410	1267	0.187	236	238	150	0.3	0.4	4.971	A
3 - Top Brand	240	60	359	1167	0.206	243	246	287	0.2	0.2	5.016	A
4 - A42			0					286				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	500	125	57	1412	0.354	496	511	265	1.1	1.3	7.362	A
2 - Gelscoe Lane	236	59	394	1255	0.188	234	244	158	0.4	0.4	5.017	A
3 - Top Brand	249	62	358	1122	0.222	250	252	271	0.2	0.2	5.063	A
4 - A42			0					285				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	409	102	39	1434	0.285	408	417	216	1.3	0.9	6.730	A
2 - Gelscoe Lane	192	48	331	1322	0.145	191	200	116	0.4	0.2	4.774	A
3 - Top Brand	198	49	291	1151	0.172	196	203	231	0.2	0.3	4.715	A
4 - A42			0					232				

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	341	85	37	1392	0.245	338	354	186	0.9	0.7	6.312	A
2 - Gelscoe Lane	169	42	274	1322	0.128	170	171	101	0.2	0.2	4.555	A
3 - Top Brand	166	42	256	1210	0.138	168	173	187	0.3	0.2	4.552	A
4 - A42			0					201				

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	210	961	0.219	208	205	0.0	0.5	6.147	A
			2	1, 4	132	961	0.138	133	134	0.0	0.2	6.178	A
		2	1	(1, 2, 3, 4)	343			343	341	0.0	0.0	0.264	A
	Exit	1	1		172			172	181	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	101	891	0.114	101	104	0.0	0.1	4.597	A
			2	1, 2	52	891	0.058	51	57	0.0	0.1	4.268	A
		2	1	(1, 2, 3, 4)	153			153	161	0.0	0.0	0.000	A
	Exit	1	1		106			106	102	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	127	924	0.138	128	130	0.0	0.2	4.491	A
			2	2, 3	38	924	0.041	38	36	0.0	0.0	3.892	A
		2	1	(1, 2, 3, 4)	165			165	167	0.0	0.0	0.000	A
	Exit	1	1		185			185	185	0.0	0.0	0.000	A
4 - A42	Exit	1	1		195			195	197	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	249	958	0.260	248	252	0.5	0.5	6.248	A
			2	1, 4	164	958	0.171	164	163	0.2	0.4	6.510	A
		2	1	(1, 2, 3, 4)	413			413	415	0.0	0.0	0.137	A
	Exit	1	1		210			210	218	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	123	873	0.141	123	129	0.1	0.2	4.732	A
			2	1, 2	65	873	0.074	65	67	0.1	0.1	4.501	A
		2	1	(1, 2, 3, 4)	187			187	196	0.0	0.0	0.000	A
	Exit	1	1		128			128	126	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	150	904	0.165	151	158	0.2	0.2	4.980	A
			2	2, 3	48	904	0.053	48	44	0.0	0.1	4.057	A
		2	1	(1, 2, 3, 4)	197			197	202	0.0	0.0	0.000	A
	Exit	1	1		220			220	229	0.0	0.0	0.000	A
4 - A42	Exit	1	1		241			241	241	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	314	956	0.328	310	316	0.5	0.7	7.233	A
			2	1, 4	194	956	0.203	197	195	0.4	0.3	6.499	A
		2	1	(1, 2, 3, 4)	510			509	512	0.0	0.1	0.487	A
	Exit	1	1		264			264	267	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	155	848	0.183	155	154	0.2	0.2	5.065	A
			2	1, 2	82	848	0.097	81	84	0.1	0.2	4.801	A
		2	1	(1, 2, 3, 4)	237			237	239	0.0	0.0	0.000	A
	Exit	1	1		150			150	155	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	2	2, 3	52	885	0.059	52	54	0.1	0.1	4.208	A
		2	1	(1, 2, 3, 4)	240			240	246	0.0	0.0	0.003	A
	Exit	1	1		287			287	287	0.0	0.0	0.000	A
4 - A42	Exit	1	1		286			286	285	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	304	955	0.318	303	310	0.7	0.8	7.035	A
			2	1, 4	196	955	0.205	193	201	0.3	0.6	6.839	A
		2	1	(1, 2, 3, 4)	500			500	512	0.1	0.0	0.404	A
	Exit	1	1		265			265	272	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	154	853	0.181	152	159	0.2	0.3	5.130	A
			2	1, 2	82	853	0.096	82	85	0.2	0.1	4.803	A
		2	1	(1, 2, 3, 4)	236			236	244	0.0	0.0	0.000	A
	Exit	1	1		158			158	156	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	192	886	0.217	193	197	0.2	0.2	5.253	A
			2	2, 3	57	886	0.064	57	56	0.1	0.1	4.389	A
		2	1	(1, 2, 3, 4)	249			249	252	0.0	0.0	0.002	A
	Exit	1	1		271			271	285	0.0	0.0	0.000	A
4 - A42	Exit	1	1		285			285	295	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	254	961	0.264	252	260	0.8	0.6	6.602	A
			2	1, 4	155	961	0.161	156	158	0.6	0.3	6.092	A
		2	1	(1, 2, 3, 4)	409			409	416	0.0	0.0	0.304	A
	Exit	1	1		216			216	222	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	125	873	0.143	124	129	0.3	0.2	4.911	A
			2	1, 2	67	873	0.077	67	71	0.1	0.0	4.526	A
		2	1	(1, 2, 3, 4)	192			192	199	0.0	0.0	0.000	A
	Exit	1	1		116			116	127	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	159	907	0.175	157	159	0.2	0.3	4.928	A
			2	2, 3	39	907	0.043	39	44	0.1	0.0	3.952	A
		2	1	(1, 2, 3, 4)	198			198	203	0.0	0.0	0.000	A
	Exit	1	1		231			231	237	0.0	0.0	0.000	A
4 - A42	Exit	1	1		232			232	235	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	203	961	0.212	202	215	0.6	0.4	6.281	A
			2	1, 4	137	961	0.142	136	140	0.3	0.3	6.015	A
		2	1	(1, 2, 3, 4)	341			340	354	0.0	0.0	0.141	A
	Exit	1	1		186			186	188	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	109	891	0.122	110	112	0.2	0.1	4.660	A
			2	1, 2	60	891	0.067	60	59	0.0	0.0	4.356	A
		2	1	(1, 2, 3, 4)	169			169	171	0.0	0.0	0.000	A
	Exit	1	1		101			101	105	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	129	918	0.141	131	136	0.3	0.1	4.719	A
			2	2, 3	37	918	0.040	37	37	0.0	0.0	3.951	A
		2	1	(1, 2, 3, 4)	166			166	172	0.0	0.0	0.000	A
	Exit	1	1		187			187	198	0.0	0.0	0.000	A
4 - A42	Exit	1	1		201			201	206	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	973	961	0.072	68	66	0.0	0.2	6.058	A
				3	141	35	973	961	0.146	140	138	0.0	0.3	6.191	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	132	33	973	961	0.138	133	134	0.0	0.2	6.178	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	-	-	-	69	67	0.0	0.0	0.158	A
				3	141	35	-	-	-	141	139	0.0	0.0	0.257	A
				4	132	33	-	-	-	132	134	0.0	0.0	0.328	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	45	11	978	891	0.051	45	46	0.0	0.0	4.599	A
				4	56	14	978	890	0.063	56	57	0.0	0.1	4.595	A
			2	1	52	13	978	891	0.058	51	57	0.0	0.1	4.268	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	52	13	-	-	-	52	57	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	45	11	-	-	-	45	47	0.0	0.0	0.000	A
				4	56	14	-	-	-	56	58	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	120	30	1001	923	0.130	121	124	0.0	0.1	4.495	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	743	688	0.010	7	6	0.0	0.0	4.421	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	9	1001	923	0.041	38	36	0.0	0.0	3.892	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	120	30	-	-	-	120	125	0.0	0.0	0.000	A
				2	38	9	-	-	-	38	36	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	-	-	-	7	6	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	79	20	973	958	0.083	80	82	0.2	0.1	5.979	A
				3	170	42	973	958	0.177	167	171	0.3	0.4	6.378	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	164	41	973	958	0.171	164	163	0.2	0.4	6.510	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	79	20	-	-	-	79	81	0.0	0.0	0.142	A
				3	170	42	-	-	-	170	171	0.0	0.0	0.159	A
				4	164	41	-	-	-	164	163	0.0	0.0	0.110	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	53	13	978	875	0.060	52	58	0.0	0.1	4.617	A
				4	70	17	978	873	0.080	71	71	0.1	0.1	4.827	A
			2	1	65	16	978	874	0.074	65	67	0.1	0.1	4.501	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	65	16	-	-	-	65	67	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	53	13	-	-	-	53	58	0.0	0.0	0.000	A
				4	70	17	-	-	-	70	70	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	143	36	1001	906	0.158	145	151	0.1	0.1	4.992	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	6	2	882	798	0.008	6	7	0.0	0.0	4.751	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	48	12	1001	904	0.053	48	44	0.0	0.1	4.057	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	143	36	-	-	-	143	151	0.0	0.0	0.000	A
				2	48	12	-	-	-	48	44	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	6	2	-	-	-	6	7	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	99	25	973	956	0.103	98	101	0.1	0.3	7.138	A
				3	215	54	973	957	0.225	213	215	0.4	0.4	7.279	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	194	49	973	956	0.203	197	195	0.4	0.3	6.499	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	99	25	-	-	-	99	102	0.0	0.0	0.570	A
				3	216	54	-	-	-	215	215	0.0	0.0	0.485	A
				4	194	49	-	-	-	194	195	0.0	0.0	0.442	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	74	18	978	849	0.087	74	72	0.1	0.1	4.918	A
				4	81	20	978	850	0.095	81	82	0.1	0.2	5.194	A
			2	1	82	21	978	849	0.097	81	84	0.1	0.2	4.801	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	82	21	-	-	-	82	84	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	74	18	-	-	-	74	72	0.0	0.0	0.000	A
				4	81	20	-	-	-	81	82	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	180	45	1001	885	0.203	183	183	0.1	0.2	5.253	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	8	2	922	819	0.010	8	9	0.0	0.0	5.023	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	1001	886	0.059	52	54	0.1	0.1	4.208	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	180	45	-	-	-	180	183	0.0	0.0	0.001	A
				2	52	13	-	-	-	52	54	0.0	0.0	0.003	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	8	2	-	-	-	8	8	0.0	0.0	0.026	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	102	25	973	956	0.107	102	100	0.3	0.2	6.718	A
				3	202	51	973	955	0.212	201	210	0.4	0.5	7.193	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	196	49	973	955	0.205	193	201	0.3	0.6	6.839	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	102	25	-	-	-	102	100	0.0	0.0	0.426	A
				3	202	51	-	-	-	202	210	0.0	0.0	0.395	A
				4	196	49	-	-	-	196	202	0.0	0.0	0.400	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	70	18	978	851	0.083	70	75	0.1	0.1	5.013	A
				4	84	21	978	852	0.099	83	85	0.2	0.2	5.234	A
			2	1	82	20	978	852	0.096	82	85	0.2	0.1	4.803	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	82	20	-	-	-	82	85	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	70	18	-	-	-	70	75	0.0	0.0	0.000	A
				4	84	21	-	-	-	84	85	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	183	46	1001	886	0.206	184	187	0.2	0.2	5.242	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	9	2	892	788	0.012	10	9	0.0	0.0	5.473	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	57	14	1001	886	0.064	57	56	0.1	0.1	4.389	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	183	46	-	-	-	183	187	0.0	0.0	0.003	A
				2	57	14	-	-	-	57	56	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	9	2	-	-	-	9	9	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	78	20	973	961	0.081	77	82	0.2	0.2	6.676	A
				3	175	44	973	961	0.183	175	177	0.5	0.4	6.566	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	155	39	973	961	0.161	156	158	0.6	0.3	6.092	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	78	20	-	-	-	78	82	0.0	0.0	0.363	A
				3	176	44	-	-	-	175	177	0.0	0.0	0.310	A
				4	155	39	-	-	-	155	157	0.0	0.0	0.264	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	56	14	978	871	0.064	56	60	0.1	0.1	4.995	A
				4	69	17	978	871	0.079	68	69	0.2	0.1	4.839	A
			2	1	67	17	978	872	0.077	67	71	0.1	0.0	4.526	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	67	17	-	-	-	67	71	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	56	14	-	-	-	56	59	0.0	0.0	0.000	A
				4	69	17	-	-	-	69	69	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	150	38	1001	906	0.166	149	151	0.2	0.2	4.913	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	9	2	922	834	0.010	8	8	0.0	0.0	5.196	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	39	10	1001	906	0.043	39	44	0.1	0.0	3.952	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	150	38	-	-	-	150	151	0.0	0.0	0.000	A
				2	39	10	-	-	-	39	44	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	9	2	-	-	-	9	8	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	65	16	973	961	0.068	64	68	0.2	0.1	6.180	A
				3	138	35	973	962	0.144	138	146	0.4	0.2	6.330	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	137	34	973	961	0.142	136	140	0.3	0.3	6.015	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	65	16	-	-	-	65	68	0.0	0.0	0.140	A
				3	138	35	-	-	-	138	146	0.0	0.0	0.164	A
				4	137	34	-	-	-	137	140	0.0	0.0	0.115	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	49	12	978	889	0.055	49	52	0.1	0.1	4.650	A
				4	60	15	978	890	0.068	60	60	0.1	0.1	4.668	A
			2	1	60	15	978	889	0.067	60	59	0.0	0.0	4.356	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	60	15	-	-	-	60	59	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	49	12	-	-	-	49	52	0.0	0.0	0.000	A
				4	60	15	-	-	-	60	60	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	124	31	1001	920	0.135	126	129	0.2	0.1	4.727	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	5	1	753	692	0.008	5	6	0.0	0.0	4.542	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	37	9	1001	920	0.040	37	37	0.0	0.0	3.951	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	124	31	-	-	-	124	129	0.0	0.0	0.000	A
				2	37	9	-	-	-	37	37	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	5	1	-	-	-	5	6	0.0	0.0	0.000	A

2038 | WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	7.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.85	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2038	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	626	100.000
2 - Gelscoe Lane		ONE HOUR	✓	203	100.000
3 - Top Brand		ONE HOUR	✓	430	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	292	175	159
	2 - Gelscoe Lane	93	0	33	77
	3 - Top Brand	274	113	0	43
	4 - A42	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	16	7
	2 - Gelscoe Lane	0	0	3	3
	3 - Top Brand	13	0	0	87
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A453 (N)	0.57	8.76	1.8	A	576	864
2 - Gelscoe Lane	0.15	5.06	0.3	A	183	274
3 - Top Brand	0.38	7.81	1.0	A	394	591
4 - A42						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	478	120	85	1237	0.387	478	464	288	0.0	0.8	5.855	A
2 - Gelscoe Lane	148	37	260	1505	0.098	146	150	303	0.0	0.3	4.339	A
3 - Top Brand	335	84	240	1239	0.270	338	321	167	0.0	0.4	5.812	A
4 - A42			0					205				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	559	140	104	1272	0.439	559	564	326	0.8	1.0	6.988	A
2 - Gelscoe Lane	175	44	292	1422	0.123	175	185	371	0.3	0.3	4.694	A
3 - Top Brand	384	96	286	1295	0.297	390	389	180	0.4	0.5	6.268	A
4 - A42			0					247				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	679	170	124	1193	0.569	679	689	391	1.0	1.7	8.763	A
2 - Gelscoe Lane	213	53	357	1428	0.149	212	229	446	0.3	0.3	4.900	A
3 - Top Brand	468	117	350	1230	0.381	467	481	218	0.5	1.0	7.348	A
4 - A42			0					304				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	694	173	124	1242	0.558	692	702	392	1.7	1.8	8.623	A
2 - Gelscoe Lane	218	55	365	1430	0.153	217	230	451	0.3	0.3	5.057	A
3 - Top Brand	469	117	356	1239	0.379	467	488	227	1.0	0.9	7.809	A
4 - A42			0					306				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	576	144	97	1235	0.466	576	573	334	1.8	1.1	7.019	A
2 - Gelscoe Lane	184	46	307	1479	0.125	184	186	365	0.3	0.2	4.767	A
3 - Top Brand	391	98	304	1249	0.313	386	395	187	0.9	1.0	6.509	A
4 - A42			0					259				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	469	117	92	1268	0.370	470	470	268	1.1	0.6	6.132	A
2 - Gelscoe Lane	158	39	256	1435	0.110	157	161	307	0.2	0.2	4.578	A
3 - Top Brand	318	79	261	1287	0.247	319	334	152	1.0	0.5	5.879	A
4 - A42			0					219				

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	361	946	0.382	361	348	0.0	0.7	6.006	A
			2	1, 4	117	946	0.124	117	116	0.0	0.1	4.680	A
		2	1	(1, 2, 3, 4)	478			478	467	0.0	0.0	0.178	A
	Exit	1	1		288			288	275	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	77	895	0.086	76	81	0.0	0.2	4.396	A
			2	1, 2	71	895	0.080	70	69	0.0	0.1	4.274	A
		2	1	(1, 2, 3, 4)	148			148	151	0.0	0.0	0.000	A
	Exit	1	1		303			303	300	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	250	924	0.270	253	237	0.0	0.4	6.321	A
			2	2, 3	85	924	0.092	85	84	0.0	0.1	4.506	A
		2	1	(1, 2, 3, 4)	335			335	323	0.0	0.0	0.029	A
	Exit	1	1		167			167	155	0.0	0.0	0.000	A
4 - A42	Exit	1	1		205			205	204	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	421	940	0.447	420	422	0.7	0.8	7.150	A
			2	1, 4	139	940	0.147	139	141	0.1	0.2	4.692	A
		2	1	(1, 2, 3, 4)	559			559	564	0.0	0.0	0.445	A
	Exit	1	1		326			326	330	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	95	885	0.107	94	99	0.2	0.1	4.665	A
			2	1, 2	81	885	0.091	80	86	0.1	0.1	4.726	A
		2	1	(1, 2, 3, 4)	175			175	185	0.0	0.0	0.000	A
	Exit	1	1		371			371	368	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	283	909	0.312	286	285	0.4	0.4	6.723	A
			2	2, 3	102	909	0.112	104	103	0.1	0.1	4.451	A
		2	1	(1, 2, 3, 4)	384			385	389	0.0	0.0	0.230	A
	Exit	1	1		180			180	187	0.0	0.0	0.000	A
4 - A42	Exit	1	1		247			247	252	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	502	934	0.537	503	514	0.8	1.1	8.264	A
			2	1, 4	176	934	0.189	176	175	0.2	0.3	5.205	A
		2	1	(1, 2, 3, 4)	679			678	691	0.0	0.3	1.256	A
	Exit	1	1		391			391	411	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	113	865	0.131	112	121	0.1	0.2	5.118	A
			2	1, 2	99	865	0.115	100	108	0.1	0.1	4.637	A
		2	1	(1, 2, 3, 4)	213			213	229	0.0	0.0	0.010	A
	Exit	1	1		446			446	452	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	345	888	0.388	343	352	0.4	0.9	8.072	A
			2	2, 3	123	888	0.139	124	128	0.1	0.1	4.849	A
		2	1	(1, 2, 3, 4)	468			468	483	0.0	0.0	0.252	A
	Exit	1	1		218			218	229	0.0	0.0	0.000	A
4 - A42	Exit	1	1		304			304	307	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	516	934	0.553	516	521	1.1	1.3	8.091	A
			2	1, 4	177	934	0.189	177	181	0.3	0.2	5.001	A
		2	1	(1, 2, 3, 4)	694			693	702	0.3	0.2	1.322	A
	Exit	1	1		392			392	420	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	118	862	0.136	117	122	0.2	0.2	5.092	A
			2	1, 2	101	862	0.117	100	107	0.1	0.2	5.018	A
		2	1	(1, 2, 3, 4)	218			218	230	0.0	0.0	0.000	A
	Exit	1	1		451			451	453	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	344	887	0.388	343	363	0.9	0.6	8.548	A
			2	2, 3	125	887	0.141	124	125	0.1	0.3	4.771	A
		2	1	(1, 2, 3, 4)	469			469	487	0.0	0.0	0.370	A
	Exit	1	1		227			227	230	0.0	0.0	0.000	A
4 - A42	Exit	1	1		306			306	316	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	428	942	0.454	428	429	1.3	0.8	7.099	A
			2	1, 4	148	942	0.157	148	144	0.2	0.2	5.052	A
		2	1	(1, 2, 3, 4)	576			576	571	0.2	0.1	0.435	A
	Exit	1	1		334			334	339	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	99	880	0.112	98	99	0.2	0.2	4.752	A
			2	1, 2	85	880	0.097	86	86	0.2	0.0	4.785	A
		2	1	(1, 2, 3, 4)	184			184	185	0.0	0.0	0.000	A
	Exit	1	1		365			365	370	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	293	903	0.324	289	293	0.6	0.8	7.192	A
			2	2, 3	98	903	0.108	97	102	0.3	0.2	4.463	A
		2	1	(1, 2, 3, 4)	391			391	396	0.0	0.0	0.117	A
	Exit	1	1		187			187	191	0.0	0.0	0.000	A
4 - A42	Exit	1	1		259			259	254	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	341	944	0.361	341	353	0.8	0.5	6.265	A
			2	1, 4	128	944	0.135	129	117	0.2	0.1	4.766	A
		2	1	(1, 2, 3, 4)	469			469	469	0.1	0.0	0.247	A
	Exit	1	1		268			268	281	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	87	897	0.098	87	88	0.2	0.2	4.686	A
			2	1, 2	70	897	0.078	70	74	0.0	0.1	4.456	A
		2	1	(1, 2, 3, 4)	158			158	161	0.0	0.0	0.000	A
	Exit	1	1		307			307	316	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	227	917	0.247	227	241	0.8	0.4	6.468	A
			2	2, 3	92	917	0.100	92	93	0.2	0.1	4.268	A
		2	1	(1, 2, 3, 4)	318			318	332	0.0	0.0	0.108	A
	Exit	1	1		152			152	156	0.0	0.0	0.000	A
4 - A42	Exit	1	1		219			219	213	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	217	54	973	946	0.229	218	216	0.0	0.3	5.787	A
				3	145	36	973	946	0.153	143	132	0.0	0.4	6.423	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	117	29	973	946	0.124	117	116	0.0	0.1	4.680	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	217	54	-	-	-	217	218	0.0	0.0	0.189	A
				3	145	36	-	-	-	145	133	0.0	0.0	0.200	A
				4	117	29	-	-	-	117	116	0.0	0.0	0.132	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	24	6	978	897	0.026	23	24	0.0	0.0	4.284	A
				4	53	13	978	896	0.060	53	57	0.0	0.1	4.442	A
			2	1	71	18	978	897	0.079	70	69	0.0	0.1	4.274	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	71	18	-	-	-	71	70	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	24	6	-	-	-	24	24	0.0	0.0	0.000	A
				4	53	13	-	-	-	53	58	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	217	54	1001	923	0.235	218	206	0.0	0.3	5.998	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	33	8	988	910	0.036	34	31	0.0	0.1	9.825	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	85	21	1001	922	0.092	85	84	0.0	0.1	4.506	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	217	54	-	-	-	217	207	0.0	0.0	0.037	A
				2	85	21	-	-	-	85	84	0.0	0.0	0.007	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	33	8	-	-	-	33	31	0.0	0.0	0.048	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	266	67	973	940	0.283	267	265	0.3	0.4	7.019	A
				3	154	39	973	940	0.164	153	157	0.4	0.4	7.403	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	139	35	973	939	0.147	139	141	0.1	0.2	4.692	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	266	67	-	-	-	266	265	0.0	0.0	0.470	A
				3	154	39	-	-	-	154	157	0.0	0.0	0.535	A
				4	139	35	-	-	-	139	142	0.0	0.0	0.303	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	27	7	978	888	0.031	27	30	0.0	0.0	4.676	A
				4	67	17	978	887	0.076	67	70	0.1	0.1	4.661	A
			2	1	81	20	978	885	0.091	80	86	0.1	0.1	4.726	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	81	20	-	-	-	81	86	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	27	7	-	-	-	27	29	0.0	0.0	0.000	A
				4	67	17	-	-	-	67	70	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	243	61	1001	909	0.268	245	244	0.3	0.4	6.422	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	40	10	1001	910	0.044	41	41	0.1	0.0	9.707	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	102	26	1001	909	0.112	104	103	0.1	0.1	4.451	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	243	61	-	-	-	243	245	0.0	0.0	0.281	A
				2	102	25	-	-	-	102	103	0.0	0.0	0.112	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	40	10	-	-	-	40	41	0.0	0.0	0.283	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	321	80	973	934	0.344	322	324	0.4	0.7	8.115	A
				3	181	45	973	933	0.194	181	190	0.4	0.4	8.558	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	176	44	973	935	0.189	176	175	0.2	0.3	5.205	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	321	80	-	-	-	321	325	0.0	0.1	1.310	A
				3	182	45	-	-	-	181	191	0.0	0.1	1.452	A
				4	176	44	-	-	-	176	175	0.0	0.0	0.950	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	37	9	978	864	0.043	37	38	0.0	0.1	5.104	A
				4	76	19	978	864	0.088	75	83	0.1	0.2	5.125	A
			2	1	99	25	978	865	0.115	100	108	0.1	0.1	4.637	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	99	25	-	-	-	99	107	0.0	0.0	0.009	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	37	9	-	-	-	37	39	0.0	0.0	0.000	A
				4	76	19	-	-	-	76	83	0.0	0.0	0.018	A
3 - Top Brand	Entry	1	1	1	293	73	1001	889	0.330	291	303	0.4	0.8	7.802	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	52	13	1001	885	0.058	52	49	0.0	0.1	10.848	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	123	31	1001	887	0.139	124	128	0.1	0.1	4.849	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	293	73	-	-	-	293	305	0.0	0.0	0.279	A
				2	123	31	-	-	-	123	129	0.0	0.0	0.178	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	52	13	-	-	-	52	49	0.0	0.0	0.334	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	326	82	973	935	0.349	327	328	0.7	0.7	7.861	A
				3	190	48	973	934	0.204	189	193	0.4	0.6	8.546	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	177	44	973	934	0.189	177	181	0.3	0.2	5.001	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	327	82	-	-	-	326	328	0.1	0.1	1.494	A
				3	190	48	-	-	-	190	194	0.1	0.0	1.314	A
				4	177	44	-	-	-	177	180	0.0	0.0	0.993	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	38	9	978	863	0.044	37	37	0.1	0.1	5.061	A
				4	80	20	978	864	0.093	80	85	0.2	0.1	5.106	A
			2	1	101	25	978	861	0.117	100	107	0.1	0.2	5.018	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	101	25	-	-	-	101	108	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	38	9	-	-	-	38	37	0.0	0.0	0.000	A
				4	80	20	-	-	-	80	85	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	294	73	1001	886	0.332	293	313	0.8	0.6	8.302	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	50	13	1001	887	0.057	50	51	0.1	0.0	11.050	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	125	31	1001	886	0.141	124	125	0.1	0.3	4.771	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	294	73	-	-	-	294	312	0.0	0.0	0.419	A
				2	125	31	-	-	-	125	125	0.0	0.0	0.232	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	50	13	-	-	-	50	50	0.0	0.0	0.514	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	270	68	973	942	0.287	269	268	0.7	0.5	6.920	A
				3	158	40	973	942	0.168	159	161	0.6	0.3	7.447	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	148	37	973	942	0.157	148	144	0.2	0.2	5.052	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	270	68	-	-	-	270	267	0.1	0.1	0.493	A
				3	158	40	-	-	-	158	160	0.0	0.0	0.462	A
				4	148	37	-	-	-	148	143	0.0	0.0	0.292	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	29	7	978	880	0.033	28	30	0.1	0.1	4.683	A
				4	70	18	978	879	0.080	70	70	0.1	0.1	4.781	A
			2	1	85	21	978	880	0.097	86	86	0.2	0.0	4.785	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	85	21	-	-	-	85	86	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	29	7	-	-	-	29	30	0.0	0.0	0.000	A
				4	70	18	-	-	-	70	69	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	250	62	1001	902	0.277	247	253	0.6	0.7	6.882	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	42	11	1001	906	0.047	41	41	0.0	0.1	10.365	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	98	24	1001	903	0.108	97	102	0.3	0.2	4.463	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	250	62	-	-	-	250	253	0.0	0.0	0.142	A
				2	98	24	-	-	-	98	102	0.0	0.0	0.069	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	42	11	-	-	-	42	41	0.0	0.0	0.087	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	215	54	973	944	0.228	215	223	0.5	0.4	5.944	A
				3	126	32	973	944	0.134	126	130	0.3	0.2	6.905	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	128	32	973	945	0.135	129	117	0.2	0.1	4.766	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	215	54	-	-	-	215	222	0.1	0.0	0.286	A
				3	126	32	-	-	-	126	130	0.0	0.0	0.282	A
				4	128	32	-	-	-	128	117	0.0	0.0	0.134	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	7	978	899	0.029	26	26	0.1	0.1	4.851	A
				4	61	15	978	898	0.068	61	62	0.1	0.1	4.617	A
			2	1	70	18	978	899	0.078	70	74	0.0	0.1	4.456	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	70	18	-	-	-	70	74	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	7	-	-	-	26	26	0.0	0.0	0.000	A
				4	61	15	-	-	-	61	62	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	198	49	1001	917	0.215	198	207	0.7	0.3	6.193	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	29	7	1001	921	0.031	29	34	0.1	0.1	9.250	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	92	23	1001	918	0.100	92	93	0.2	0.1	4.268	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	198	49	-	-	-	198	206	0.0	0.0	0.114	A
				2	92	23	-	-	-	92	93	0.0	0.0	0.081	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	29	7	-	-	-	29	33	0.0	0.0	0.187	A

2038 | WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.90	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2038	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	496	100.000
2 - Gelscoe Lane		ONE HOUR	✓	371	100.000
3 - Top Brand		ONE HOUR	✓	208	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	86	193	217
	2 - Gelscoe Lane	99	0	113	159
	3 - Top Brand	147	51	0	10
	4 - A42	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	26	32	34
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	1	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A453 (N)	0.39	7.68	1.5	A	453	680
2 - Gelscoe Lane	0.36	6.70	1.0	A	342	513
3 - Top Brand	0.23	5.42	0.5	A	191	287
4 - A42						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	388	97	38	1474	0.263	386	385	177	0.0	0.8	6.256	A
2 - Gelscoe Lane	282	70	327	1224	0.230	281	275	97	0.0	0.4	5.288	A
3 - Top Brand	151	38	375	1164	0.129	151	158	233	0.0	0.2	4.642	A
4 - A42			0					311				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	426	107	45	1410	0.302	430	456	213	0.8	0.8	7.052	A
2 - Gelscoe Lane	328	82	356	1201	0.273	330	343	119	0.4	0.4	5.413	A
3 - Top Brand	185	46	424	1112	0.166	183	193	261	0.2	0.3	4.882	A
4 - A42			0					350				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	530	133	60	1441	0.368	533	548	264	0.8	0.9	7.682	A
2 - Gelscoe Lane	410	102	454	1153	0.355	407	418	140	0.4	1.0	6.698	A
3 - Top Brand	230	57	530	1139	0.202	227	235	331	0.3	0.5	5.415	A
4 - A42			0					432				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	551	138	62	1417	0.389	550	545	272	0.9	1.5	7.430	A
2 - Gelscoe Lane	409	102	459	1160	0.353	412	416	153	1.0	0.5	6.566	A
3 - Top Brand	240	60	545	1055	0.228	243	238	327	0.5	0.3	5.364	A
4 - A42			0					454				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	458	114	45	1405	0.326	455	460	219	1.5	1.1	7.057	A
2 - Gelscoe Lane	332	83	387	1087	0.305	332	344	114	0.5	0.3	5.463	A
3 - Top Brand	184	46	425	1201	0.153	182	186	294	0.3	0.5	5.237	A
4 - A42			0					342				

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	367	92	40	1431	0.257	363	372	185	1.1	0.8	6.578	A
2 - Gelscoe Lane	290	73	305	1152	0.252	291	292	99	0.3	0.4	5.102	A
3 - Top Brand	157	39	357	1180	0.133	157	160	237	0.5	0.2	4.890	A
4 - A42			0					290				

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	206	961	0.214	207	215	0.0	0.5	6.110	A
			2	1, 4	182	961	0.189	179	170	0.0	0.3	6.233	A
		2	1	(1, 2, 3, 4)	388			388	388	0.0	0.0	0.093	A
	Exit	1	1		177			177	184	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	211	874	0.241	210	203	0.0	0.3	5.421	A
			2	1, 2	71	874	0.081	71	72	0.0	0.0	4.910	A
		2	1	(1, 2, 3, 4)	282			282	277	0.0	0.0	0.001	A
	Exit	1	1		97			97	102	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	113	881	0.128	113	120	0.0	0.1	4.784	A
			2	2, 3	38	881	0.043	38	39	0.0	0.0	4.207	A
		2	1	(1, 2, 3, 4)	151			151	159	0.0	0.0	0.000	A
	Exit	1	1		233			233	234	0.0	0.0	0.000	A
4 - A42	Exit	1	1		311			311	299	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	228	959	0.238	229	251	0.5	0.4	6.890	A
			2	1, 4	198	959	0.206	200	205	0.3	0.4	6.707	A
		2	1	(1, 2, 3, 4)	426			426	456	0.0	0.0	0.242	A
	Exit	1	1		213			213	228	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	245	865	0.284	246	253	0.3	0.3	5.731	A
			2	1, 2	83	865	0.096	84	90	0.0	0.1	4.511	A
		2	1	(1, 2, 3, 4)	328			328	343	0.0	0.0	0.001	A
	Exit	1	1		119			119	127	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	139	865	0.161	138	145	0.1	0.2	5.014	A
			2	2, 3	46	865	0.053	45	48	0.0	0.1	4.483	A
		2	1	(1, 2, 3, 4)	185			185	194	0.0	0.0	0.000	A
	Exit	1	1		261			261	278	0.0	0.0	0.000	A
4 - A42	Exit	1	1		350			350	360	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	288	954	0.301	291	300	0.4	0.4	7.331	A
			2	1, 4	243	954	0.255	243	248	0.4	0.5	6.953	A
		2	1	(1, 2, 3, 4)	530			531	549	0.0	0.0	0.520	A
	Exit	1	1		264			264	278	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	299	834	0.358	299	304	0.3	0.8	7.165	A
			2	1, 2	111	834	0.133	109	114	0.1	0.2	4.967	A
		2	1	(1, 2, 3, 4)	410			410	420	0.0	0.0	0.131	A
	Exit	1	1		140			140	149	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	170	831	0.204	167	176	0.2	0.4	5.720	A
			2	2, 3	60	831	0.072	60	58	0.1	0.1	4.497	A
		2	1	(1, 2, 3, 4)	230			230	235	0.0	0.0	0.000	A
	Exit	1	1		331			331	334	0.0	0.0	0.000	A
4 - A42	Exit	1	1		432			432	439	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	298	954	0.313	298	308	0.4	0.9	7.227	A
			2	1, 4	253	954	0.265	253	237	0.5	0.5	6.301	A
		2	1	(1, 2, 3, 4)	551			551	547	0.0	0.1	0.591	A
	Exit	1	1		272			272	279	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	306	832	0.368	309	305	0.8	0.4	6.987	A
			2	1, 2	103	832	0.124	104	111	0.2	0.1	5.104	A
		2	1	(1, 2, 3, 4)	409			409	414	0.0	0.0	0.083	A
	Exit	1	1		153			153	154	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	179	826	0.217	181	179	0.4	0.2	5.553	A
			2	2, 3	61	826	0.074	62	59	0.1	0.1	4.791	A
		2	1	(1, 2, 3, 4)	240			240	237	0.0	0.0	0.000	A
	Exit	1	1		327			327	338	0.0	0.0	0.000	A
4 - A42	Exit	1	1		454			454	429	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	256	959	0.267	255	262	0.9	0.5	6.794	A
			2	1, 4	200	959	0.208	200	198	0.5	0.5	6.617	A
		2	1	(1, 2, 3, 4)	458			457	459	0.1	0.0	0.344	A
	Exit	1	1		219			219	226	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	242	855	0.282	242	251	0.4	0.2	5.732	A
			2	1, 2	91	855	0.106	91	93	0.1	0.1	4.730	A
		2	1	(1, 2, 3, 4)	332			332	343	0.0	0.0	0.002	A
	Exit	1	1		114			114	121	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	140	864	0.162	137	142	0.2	0.4	5.372	A
			2	2, 3	45	864	0.051	45	44	0.1	0.0	4.802	A
		2	1	(1, 2, 3, 4)	184			184	187	0.0	0.0	0.000	A
	Exit	1	1		294			294	290	0.0	0.0	0.000	A
4 - A42	Exit	1	1		342			342	353	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	207	961	0.215	204	205	0.5	0.5	6.435	A
			2	1, 4	160	961	0.166	160	167	0.5	0.3	6.294	A
		2	1	(1, 2, 3, 4)	367			367	371	0.0	0.0	0.204	A
	Exit	1	1		185			185	189	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	218	881	0.247	216	216	0.2	0.3	5.435	A
			2	1, 2	73	881	0.083	74	77	0.1	0.1	4.164	A
		2	1	(1, 2, 3, 4)	290			290	293	0.0	0.0	0.000	A
	Exit	1	1		99			99	104	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	119	886	0.134	117	119	0.4	0.2	5.115	A
			2	2, 3	38	886	0.043	40	41	0.0	0.0	4.250	A
		2	1	(1, 2, 3, 4)	157			157	159	0.0	0.0	0.000	A
	Exit	1	1		237			237	233	0.0	0.0	0.000	A
4 - A42	Exit	1	1		290			290	299	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	973	961	0.061	59	63	0.0	0.1	6.103	A
				3	147	37	973	961	0.153	148	152	0.0	0.4	6.114	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	182	45	973	961	0.189	179	170	0.0	0.3	6.233	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	-	-	-	59	64	0.0	0.0	0.100	A
				3	147	37	-	-	-	147	153	0.0	0.0	0.107	A
				4	182	45	-	-	-	182	171	0.0	0.0	0.077	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	85	21	978	877	0.097	85	82	0.0	0.1	5.578	A
				4	126	31	978	876	0.143	125	121	0.0	0.2	5.315	A
			2	1	71	18	978	877	0.081	71	72	0.0	0.0	4.910	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	71	18	-	-	-	71	72	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	85	21	-	-	-	85	83	0.0	0.0	0.000	A
				4	126	31	-	-	-	126	122	0.0	0.0	0.001	A
3 - Top Brand	Entry	1	1	1	105	26	1001	883	0.119	106	112	0.0	0.1	4.768	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	876	779	0.009	8	8	0.0	0.0	5.015	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	10	1001	884	0.043	38	39	0.0	0.0	4.207	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	105	26	-	-	-	105	112	0.0	0.0	0.000	A
				2	38	10	-	-	-	38	39	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	-	-	-	7	8	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	75	19	973	958	0.078	74	80	0.1	0.1	6.817	A
				3	154	38	973	958	0.160	155	172	0.4	0.3	6.925	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	198	49	973	958	0.206	200	205	0.3	0.4	6.707	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	75	19	-	-	-	75	79	0.0	0.0	0.228	A
				3	154	38	-	-	-	154	172	0.0	0.0	0.227	A
				4	198	49	-	-	-	198	205	0.0	0.0	0.260	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	978	865	0.122	106	106	0.1	0.1	5.629	A
				4	140	35	978	862	0.162	140	148	0.2	0.2	5.805	A
			2	1	83	21	978	862	0.096	84	90	0.0	0.1	4.511	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	83	21	-	-	-	83	90	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	-	-	-	105	106	0.0	0.0	0.002	A
				4	140	35	-	-	-	140	148	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	131	33	1001	865	0.151	129	138	0.1	0.2	5.008	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	9	2	876	755	0.011	9	8	0.0	0.0	5.122	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	11	1001	867	0.053	45	48	0.0	0.1	4.483	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	131	33	-	-	-	131	138	0.0	0.0	0.000	A
				2	46	11	-	-	-	46	48	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	9	2	-	-	-	9	8	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	79	20	973	954	0.083	79	91	0.1	0.1	7.445	A
				3	209	52	973	954	0.219	211	209	0.3	0.3	7.280	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	243	61	973	954	0.255	243	248	0.4	0.5	6.953	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	79	20	-	-	-	79	91	0.0	0.0	0.649	A
				3	209	52	-	-	-	209	209	0.0	0.0	0.496	A
				4	243	61	-	-	-	243	249	0.0	0.0	0.492	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	121	30	978	833	0.145	120	125	0.1	0.3	7.492	A
				4	178	45	978	833	0.214	179	179	0.2	0.5	6.935	A
			2	1	111	28	978	832	0.133	109	114	0.1	0.2	4.967	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	111	28	-	-	-	111	114	0.0	0.0	0.082	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	121	30	-	-	-	121	126	0.0	0.0	0.147	A
				4	178	45	-	-	-	178	180	0.0	0.0	0.151	A
3 - Top Brand	Entry	1	1	1	158	40	1001	830	0.190	156	165	0.2	0.3	5.684	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	12	3	917	763	0.015	11	12	0.0	0.0	6.212	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	60	15	1001	829	0.072	60	58	0.1	0.1	4.497	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	158	40	-	-	-	158	165	0.0	0.0	0.000	A
				2	60	15	-	-	-	60	58	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	12	3	-	-	-	12	12	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	92	23	973	955	0.097	91	95	0.1	0.2	7.024	A
				3	206	51	973	954	0.216	206	213	0.3	0.7	7.319	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	253	63	973	955	0.265	253	237	0.5	0.5	6.301	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	92	23	-	-	-	92	96	0.0	0.0	0.475	A
				3	206	52	-	-	-	206	215	0.0	0.1	0.678	A
				4	252	63	-	-	-	253	237	0.0	0.0	0.558	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	119	30	978	833	0.143	120	125	0.3	0.1	7.046	A
				4	188	47	978	832	0.225	188	180	0.5	0.3	6.946	A
			2	1	103	26	978	834	0.123	104	111	0.2	0.1	5.104	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	103	26	-	-	-	103	111	0.0	0.0	0.049	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	119	30	-	-	-	119	124	0.0	0.0	0.110	A
				4	188	47	-	-	-	188	179	0.0	0.0	0.085	A
3 - Top Brand	Entry	1	1	1	166	42	1001	826	0.201	168	168	0.3	0.2	5.573	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	13	3	959	795	0.016	13	12	0.0	0.0	5.272	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	61	15	1001	828	0.074	62	59	0.1	0.1	4.791	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	166	42	-	-	-	166	167	0.0	0.0	0.000	A
				2	61	15	-	-	-	61	59	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	13	3	-	-	-	13	12	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	973	960	0.072	69	77	0.2	0.1	6.477	A
				3	187	47	973	959	0.195	187	185	0.7	0.4	6.933	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	200	50	973	959	0.208	200	198	0.5	0.5	6.617	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	-	-	-	69	77	0.0	0.0	0.490	A
				3	187	47	-	-	-	187	184	0.1	0.0	0.310	A
				4	200	50	-	-	-	200	198	0.0	0.0	0.317	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	107	27	978	856	0.125	107	105	0.1	0.1	5.792	A
				4	135	34	978	857	0.157	135	146	0.3	0.1	5.688	A
			2	1	91	23	978	856	0.106	91	93	0.1	0.1	4.730	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	91	23	-	-	-	91	93	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	107	27	-	-	-	107	105	0.0	0.0	0.001	A
				4	135	34	-	-	-	135	146	0.0	0.0	0.003	A
3 - Top Brand	Entry	1	1	1	132	33	1001	865	0.152	129	133	0.2	0.4	5.401	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	8	2	897	771	0.011	8	9	0.0	0.0	4.938	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	45	11	1001	864	0.052	45	44	0.1	0.0	4.802	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	132	33	-	-	-	132	134	0.0	0.0	0.000	A
				2	45	11	-	-	-	45	44	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	8	2	-	-	-	8	9	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	60	15	973	961	0.062	59	63	0.1	0.1	6.274	A
				3	147	37	973	961	0.153	145	143	0.4	0.5	6.512	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	160	40	973	961	0.166	160	167	0.5	0.3	6.294	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	60	15	-	-	-	60	62	0.0	0.0	0.242	A
				3	147	37	-	-	-	147	143	0.0	0.0	0.213	A
				4	160	40	-	-	-	160	165	0.0	0.0	0.181	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	93	23	978	881	0.106	93	91	0.1	0.1	5.576	A
				4	125	31	978	884	0.141	124	125	0.1	0.2	5.333	A
			2	1	73	18	978	882	0.082	74	77	0.1	0.1	4.164	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	73	18	-	-	-	73	77	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	93	23	-	-	-	93	91	0.0	0.0	0.000	A
				4	125	31	-	-	-	125	126	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	111	28	1001	886	0.126	110	112	0.4	0.1	5.090	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	855	751	0.010	7	7	0.0	0.0	5.532	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	10	1001	889	0.043	40	41	0.0	0.0	4.250	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	111	28	-	-	-	111	111	0.0	0.0	0.000	A
				2	38	10	-	-	-	38	41	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	-	-	-	7	7	0.0	0.0	0.000	A

2028 | 2a WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.33	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.33	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2028	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	384	100.000
2 - Gelscoe Lane		ONE HOUR	✓	111	100.000
3 - Top Brand		ONE HOUR	✓	345	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	75	183	126
	2 - Gelscoe Lane	41	0	23	47
	3 - Top Brand	260	45	0	40
	4 - A42	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	1	20	8
	2 - Gelscoe Lane	0	0	5	4
	3 - Top Brand	14	0	0	82
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A453 (N)	0.32	5.91	0.9	A	361	541
2 - Gelscoe Lane	0.10	4.70	0.2	A	104	156
3 - Top Brand	0.36	7.35	0.7	A	312	468
4 - A42						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	286	72	31	1384	0.207	285	289	238	0.0	0.5	5.159	A
2 - Gelscoe Lane	86	22	231	1398	0.062	88	88	85	0.0	0.1	4.224	A
3 - Top Brand	269	67	162	1103	0.244	273	266	157	0.0	0.4	6.211	A
4 - A42			0					165				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	369	92	39	1343	0.275	371	365	265	0.5	0.3	5.643	A
2 - Gelscoe Lane	90	23	299	1394	0.065	90	100	111	0.1	0.1	4.408	A
3 - Top Brand	302	76	182	1100	0.275	306	317	206	0.4	0.3	6.256	A
4 - A42			0					185				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	419	105	47	1330	0.315	416	424	315	0.3	0.9	5.909	A
2 - Gelscoe Lane	128	32	335	1374	0.093	129	131	128	0.1	0.1	4.651	A
3 - Top Brand	358	89	245	1028	0.348	359	374	219	0.3	0.7	6.526	A
4 - A42			0					243				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	438	110	59	1389	0.316	439	436	338	0.9	0.6	5.825	A
2 - Gelscoe Lane	135	34	356	1314	0.103	135	131	142	0.1	0.2	4.661	A
3 - Top Brand	394	99	245	1090	0.362	396	392	247	0.7	0.7	7.352	A
4 - A42			0					244				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	365	91	42	1360	0.268	365	365	262	0.6	0.5	5.221	A
2 - Gelscoe Lane	95	24	298	1328	0.072	94	106	109	0.2	0.2	4.701	A
3 - Top Brand	300	75	205	1109	0.270	299	315	187	0.7	0.7	6.288	A
4 - A42			0					200				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	286	72	31	1388	0.206	287	298	217	0.5	0.4	5.067	A
2 - Gelscoe Lane	90	22	231	1391	0.065	89	91	87	0.2	0.1	4.453	A
3 - Top Brand	249	62	160	1129	0.221	251	262	161	0.7	0.3	5.578	A
4 - A42			0					161				

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	191	963	0.199	191	196	0.0	0.3	5.273	A
			2	1, 4	95	963	0.098	94	93	0.0	0.2	4.880	A
		2	1	(1, 2, 3, 4)	286			286	291	0.0	0.0	0.017	A
	Exit	1	1		238			238	232	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	54	905	0.060	55	55	0.0	0.0	4.213	A
			2	1, 2	32	905	0.035	33	32	0.0	0.0	4.241	A
		2	1	(1, 2, 3, 4)	86			86	88	0.0	0.0	0.000	A
	Exit	1	1		85			85	89	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	239	949	0.252	242	233	0.0	0.4	6.383	A
			2	2, 3	32	949	0.034	31	33	0.0	0.0	4.058	A
		2	1	(1, 2, 3, 4)	269			271	268	0.0	0.0	0.169	A
	Exit	1	1		157			157	158	0.0	0.0	0.000	A
4 - A42	Exit	1	1		165			165	163	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	260	961	0.271	263	252	0.3	0.2	5.916	A
			2	1, 4	109	961	0.114	108	112	0.2	0.1	4.645	A
		2	1	(1, 2, 3, 4)	369			369	364	0.0	0.0	0.134	A
	Exit	1	1		265			265	281	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	56	883	0.063	56	61	0.0	0.1	4.637	A
			2	1, 2	34	883	0.039	34	39	0.0	0.0	4.059	A
		2	1	(1, 2, 3, 4)	90			90	100	0.0	0.0	0.000	A
	Exit	1	1		111			111	114	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	263	942	0.280	268	277	0.4	0.3	6.572	A
			2	2, 3	39	942	0.042	39	40	0.0	0.0	3.968	A
		2	1	(1, 2, 3, 4)	302			303	317	0.0	0.0	0.068	A
	Exit	1	1		206			206	198	0.0	0.0	0.000	A
4 - A42	Exit	1	1		185			185	189	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	278	958	0.290	276	287	0.2	0.7	6.310	A
			2	1, 4	141	958	0.147	140	136	0.1	0.2	4.675	A
		2	1	(1, 2, 3, 4)	419			419	426	0.0	0.0	0.135	A
	Exit	1	1		315			315	330	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	82	872	0.094	83	82	0.1	0.1	4.776	A
			2	1, 2	46	872	0.053	46	50	0.0	0.0	4.454	A
		2	1	(1, 2, 3, 4)	128			128	132	0.0	0.0	0.000	A
	Exit	1	1		128			128	131	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	309	922	0.336	312	325	0.3	0.6	6.855	A
			2	2, 3	48	922	0.052	47	49	0.0	0.1	3.945	A
		2	1	(1, 2, 3, 4)	358			359	375	0.0	0.0	0.112	A
	Exit	1	1		219			219	231	0.0	0.0	0.000	A
4 - A42	Exit	1	1		243			243	238	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	298	954	0.312	299	297	0.7	0.4	6.209	A
			2	1, 4	140	954	0.147	140	139	0.2	0.1	4.478	A
		2	1	(1, 2, 3, 4)	438			438	435	0.0	0.0	0.194	A
	Exit	1	1		338			338	341	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	86	865	0.100	85	83	0.1	0.2	4.800	A
			2	1, 2	49	865	0.057	49	48	0.0	0.0	4.431	A
		2	1	(1, 2, 3, 4)	135			135	131	0.0	0.0	0.000	A
	Exit	1	1		142			142	138	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	336	922	0.364	337	339	0.6	0.6	7.665	A
			2	2, 3	59	922	0.064	59	53	0.1	0.0	4.226	A
		2	1	(1, 2, 3, 4)	394			394	392	0.0	0.0	0.232	A
	Exit	1	1		247			247	240	0.0	0.0	0.000	A
4 - A42	Exit	1	1		244			244	241	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	234	960	0.244	235	243	0.4	0.3	5.563	A
			2	1, 4	131	960	0.136	130	122	0.1	0.2	4.390	A
		2	1	(1, 2, 3, 4)	365			365	365	0.0	0.0	0.070	A
	Exit	1	1		262			262	280	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	62	883	0.070	61	67	0.2	0.1	4.808	A
			2	1, 2	33	883	0.038	33	38	0.0	0.0	4.520	A
		2	1	(1, 2, 3, 4)	95			95	105	0.0	0.0	0.000	A
	Exit	1	1		109			109	107	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	257	935	0.275	257	276	0.6	0.6	6.572	A
			2	2, 3	43	935	0.046	42	39	0.0	0.1	3.883	A
		2	1	(1, 2, 3, 4)	300			300	314	0.0	0.0	0.100	A
	Exit	1	1		187			187	197	0.0	0.0	0.000	A
4 - A42	Exit	1	1		200			200	202	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	194	963	0.202	196	201	0.3	0.2	5.375	A
			2	1, 4	92	963	0.095	91	97	0.2	0.1	4.374	A
		2	1	(1, 2, 3, 4)	286			286	297	0.0	0.0	0.032	A
	Exit	1	1		217			217	229	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	59	905	0.066	60	59	0.1	0.0	4.484	A
			2	1, 2	30	905	0.034	30	32	0.0	0.0	4.398	A
		2	1	(1, 2, 3, 4)	90			90	90	0.0	0.0	0.000	A
	Exit	1	1		87			87	95	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	218	949	0.230	219	226	0.6	0.3	5.871	A
			2	2, 3	31	949	0.033	31	35	0.1	0.0	3.925	A
		2	1	(1, 2, 3, 4)	249			249	261	0.0	0.0	0.021	A
	Exit	1	1		161			161	161	0.0	0.0	0.000	A
4 - A42	Exit	1	1		161			161	166	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	973	962	0.057	54	56	0.0	0.1	4.733	A
				3	136	34	973	962	0.142	137	140	0.0	0.2	5.534	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	95	24	973	962	0.099	94	93	0.0	0.2	4.880	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	-	-	-	55	57	0.0	0.0	0.032	A
				3	136	34	-	-	-	136	141	0.0	0.0	0.014	A
				4	95	24	-	-	-	95	94	0.0	0.0	0.012	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	962	892	0.023	20	19	0.0	0.0	4.465	A
				4	34	9	978	905	0.038	35	37	0.0	0.0	4.086	A
			2	1	32	8	978	905	0.035	33	32	0.0	0.0	4.241	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	32	8	-	-	-	32	32	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	-	-	-	20	19	0.0	0.0	0.000	A
				4	34	9	-	-	-	34	37	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	204	51	1001	948	0.215	205	200	0.0	0.3	6.154	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	35	9	984	935	0.038	36	33	0.0	0.1	8.615	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	32	8	1001	946	0.034	31	33	0.0	0.0	4.058	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	203	51	-	-	-	204	201	0.0	0.0	0.170	A
				2	32	8	-	-	-	32	33	0.0	0.0	0.137	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	35	9	-	-	-	35	33	0.0	0.0	0.218	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	71	18	973	961	0.074	72	74	0.1	0.1	5.323	A
				3	189	47	973	961	0.196	190	179	0.2	0.1	6.209	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	109	27	973	961	0.114	108	112	0.2	0.1	4.645	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	71	18	-	-	-	71	74	0.0	0.0	0.150	A
				3	188	47	-	-	-	189	178	0.0	0.0	0.184	A
				4	109	27	-	-	-	109	112	0.0	0.0	0.053	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	978	884	0.018	16	20	0.0	0.0	4.962	A
				4	40	10	978	882	0.046	40	41	0.0	0.1	4.483	A
			2	1	34	9	978	883	0.039	34	39	0.0	0.0	4.059	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	34	9	-	-	-	34	39	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	-	-	-	16	20	0.0	0.0	0.000	A
				4	40	10	-	-	-	40	42	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	227	57	1001	943	0.241	230	242	0.3	0.2	6.389	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	984	925	0.039	37	35	0.1	0.1	8.507	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	39	10	1001	941	0.042	39	40	0.0	0.0	3.968	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	227	57	-	-	-	227	242	0.0	0.0	0.060	A
				2	39	10	-	-	-	39	40	0.0	0.0	0.060	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	-	-	-	36	35	0.0	0.0	0.166	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	80	20	973	958	0.084	81	82	0.1	0.1	5.897	A
				3	198	49	973	958	0.207	195	205	0.1	0.6	6.502	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	141	35	973	957	0.147	140	136	0.1	0.2	4.675	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	80	20	-	-	-	80	82	0.0	0.0	0.165	A
				3	198	50	-	-	-	198	207	0.0	0.0	0.169	A
				4	141	35	-	-	-	141	137	0.0	0.0	0.070	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	24	6	978	868	0.027	24	25	0.0	0.0	4.593	A
				4	58	15	978	872	0.067	59	56	0.1	0.1	4.859	A
			2	1	46	12	978	874	0.053	46	50	0.0	0.0	4.454	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	46	12	-	-	-	46	50	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	24	6	-	-	-	24	25	0.0	0.0	0.000	A
				4	58	15	-	-	-	58	56	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	266	66	1001	922	0.288	269	280	0.2	0.5	6.655	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	44	11	984	908	0.048	44	46	0.1	0.1	8.834	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	48	12	1001	922	0.052	47	49	0.0	0.1	3.945	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	265	66	-	-	-	266	281	0.0	0.0	0.121	A
				2	48	12	-	-	-	48	49	0.0	0.0	0.059	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	44	11	-	-	-	44	46	0.0	0.0	0.123	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	82	21	973	955	0.086	83	84	0.1	0.1	5.819	A
				3	216	54	973	955	0.226	216	213	0.6	0.3	6.396	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	140	35	973	955	0.147	140	139	0.2	0.1	4.478	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	82	21	-	-	-	82	84	0.0	0.0	0.234	A
				3	216	54	-	-	-	216	212	0.0	0.0	0.243	A
				4	140	35	-	-	-	140	139	0.0	0.0	0.102	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	7	978	865	0.035	30	28	0.0	0.0	4.663	A
				4	56	14	978	866	0.065	55	55	0.1	0.2	4.868	A
			2	1	49	12	978	865	0.057	49	48	0.0	0.0	4.431	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	49	12	-	-	-	49	48	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	7	-	-	-	30	28	0.0	0.0	0.000	A
				4	56	14	-	-	-	56	55	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	287	72	1001	922	0.312	288	293	0.5	0.5	7.376	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	48	12	1001	925	0.052	48	46	0.1	0.1	10.525	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	1001	922	0.064	59	53	0.1	0.0	4.226	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	287	72	-	-	-	287	293	0.0	0.0	0.259	A
				2	59	15	-	-	-	59	53	0.0	0.0	0.140	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	48	12	-	-	-	48	46	0.0	0.0	0.158	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	67	17	973	960	0.070	67	69	0.1	0.1	5.205	A
				3	167	42	973	960	0.174	168	175	0.3	0.3	5.730	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	131	33	973	960	0.136	130	122	0.1	0.2	4.390	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	67	17	-	-	-	67	69	0.0	0.0	0.053	A
				3	167	42	-	-	-	167	175	0.0	0.0	0.103	A
				4	131	33	-	-	-	131	122	0.0	0.0	0.037	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	978	883	0.022	19	22	0.0	0.0	5.236	A
				4	42	10	978	884	0.047	41	45	0.2	0.1	4.600	A
			2	1	33	8	978	885	0.038	33	38	0.0	0.0	4.520	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	33	8	-	-	-	33	38	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	-	-	-	20	22	0.0	0.0	0.000	A
				4	42	10	-	-	-	42	45	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	227	57	1001	935	0.243	229	241	0.5	0.4	6.333	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	7	984	923	0.032	28	35	0.1	0.1	9.140	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	43	11	1001	937	0.046	42	39	0.0	0.1	3.883	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	227	57	-	-	-	227	241	0.0	0.0	0.106	A
				2	43	11	-	-	-	43	39	0.0	0.0	0.080	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	7	-	-	-	30	35	0.0	0.0	0.075	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	973	963	0.058	56	59	0.1	0.1	4.608	A
				3	138	35	973	963	0.144	140	142	0.3	0.2	5.758	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	92	23	973	963	0.095	91	97	0.2	0.1	4.374	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	-	-	-	56	59	0.0	0.0	0.044	A
				3	138	35	-	-	-	138	141	0.0	0.0	0.035	A
				4	92	23	-	-	-	92	97	0.0	0.0	0.019	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	978	905	0.023	21	19	0.0	0.0	4.440	A
				4	39	10	978	908	0.043	39	39	0.1	0.0	4.505	A
			2	1	30	8	978	906	0.034	30	32	0.0	0.0	4.398	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	30	8	-	-	-	30	32	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	-	-	-	20	19	0.0	0.0	0.000	A
				4	39	10	-	-	-	39	39	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	187	47	1001	950	0.197	187	197	0.4	0.2	5.696	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	31	8	984	931	0.033	32	30	0.1	0.1	7.735	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	31	8	1001	948	0.033	31	35	0.1	0.0	3.925	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	187	47	-	-	-	187	196	0.0	0.0	0.018	A
				2	31	8	-	-	-	31	35	0.0	0.0	0.026	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	31	8	-	-	-	31	29	0.0	0.0	0.042	A

2028 | 2a WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.00	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2028	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	388	100.000
2 - Gelscoe Lane		ONE HOUR	✓	223	100.000
3 - Top Brand		ONE HOUR	✓	106	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	53	154	181
	2 - Gelscoe Lane	93	0	53	77
	3 - Top Brand	91	12	0	3
	4 - A42	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	37	37	37
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	2	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A453 (N)	0.31	6.84	0.7	A	360	541
2 - Gelscoe Lane	0.18	5.13	0.4	A	210	315
3 - Top Brand	0.12	4.77	0.2	A	97	145
4 - A42						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	286	71	10	1452	0.197	288	299	138	0.0	0.5	6.504	A
2 - Gelscoe Lane	166	42	248	1507	0.110	168	169	51	0.0	0.2	4.483	A
3 - Top Brand	77	19	258	1045	0.074	78	81	157	0.0	0.0	4.191	A
4 - A42			0					187				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	367	92	13	1426	0.257	371	359	166	0.5	0.7	6.489	A
2 - Gelscoe Lane	200	50	326	1455	0.137	199	200	57	0.2	0.2	4.524	A
3 - Top Brand	96	24	332	1020	0.094	96	102	193	0.0	0.1	4.279	A
4 - A42			0					249				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	431	108	13	1392	0.310	429	439	220	0.7	0.7	6.802	A
2 - Gelscoe Lane	254	64	370	1396	0.182	254	254	72	0.2	0.3	4.954	A
3 - Top Brand	120	30	395	982	0.122	121	121	229	0.1	0.1	4.771	A
4 - A42			0					283				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	440	110	13	1434	0.307	441	451	208	0.7	0.7	6.839	A
2 - Gelscoe Lane	258	64	382	1396	0.185	257	248	73	0.3	0.4	5.128	A
3 - Top Brand	117	29	410	978	0.119	116	122	228	0.1	0.2	4.623	A
4 - A42			0					306				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	349	87	11	1458	0.240	350	360	175	0.7	0.6	6.628	A
2 - Gelscoe Lane	211	53	301	1454	0.145	211	208	60	0.4	0.2	4.788	A
3 - Top Brand	97	24	327	990	0.098	97	102	185	0.2	0.2	4.638	A
4 - A42			0					238				

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	289	72	8	1429	0.202	288	297	140	0.6	0.6	5.871	A
2 - Gelscoe Lane	171	43	252	1478	0.116	171	175	44	0.2	0.2	4.367	A
3 - Top Brand	76	19	264	1041	0.073	75	83	158	0.2	0.1	4.426	A
4 - A42			0					192				

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	157	970	0.162	157	163	0.0	0.3	6.428	A
			2	1, 4	129	970	0.133	131	136	0.0	0.2	6.219	A
		2	1	(1, 2, 3, 4)	286			286	301	0.0	0.0	0.172	A
	Exit	1	1		138			138	140	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	93	899	0.104	94	98	0.0	0.2	4.588	A
			2	1, 2	73	899	0.081	74	71	0.0	0.1	4.339	A
		2	1	(1, 2, 3, 4)	166			166	170	0.0	0.0	0.000	A
	Exit	1	1		51			51	52	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	67	918	0.073	68	71	0.0	0.0	4.193	A
			2	2, 3	10	918	0.011	10	10	0.0	0.0	4.180	A
		2	1	(1, 2, 3, 4)	77			77	81	0.0	0.0	0.000	A
	Exit	1	1		157			157	163	0.0	0.0	0.000	A
4 - A42	Exit	1	1		187			187	195	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	190	969	0.197	191	188	0.3	0.4	6.617	A
			2	1, 4	177	969	0.182	179	172	0.2	0.3	6.083	A
		2	1	(1, 2, 3, 4)	367			367	360	0.0	0.0	0.130	A
	Exit	1	1		166			166	171	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	114	874	0.130	113	117	0.2	0.2	4.719	A
			2	1, 2	86	874	0.098	86	83	0.1	0.1	4.249	A
		2	1	(1, 2, 3, 4)	200			200	200	0.0	0.0	0.000	A
	Exit	1	1		57			57	59	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	84	894	0.093	83	90	0.0	0.1	4.326	A
			2	2, 3	12	894	0.014	13	12	0.0	0.0	3.940	A
		2	1	(1, 2, 3, 4)	96			96	103	0.0	0.0	0.000	A
	Exit	1	1		193			193	188	0.0	0.0	0.000	A
4 - A42	Exit	1	1		249			249	244	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	232	969	0.239	232	235	0.4	0.4	6.807	A
			2	1, 4	199	969	0.205	197	205	0.3	0.4	6.151	A
		2	1	(1, 2, 3, 4)	431			431	440	0.0	0.0	0.303	A
	Exit	1	1		220			220	211	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	139	860	0.162	139	147	0.2	0.2	5.145	A
			2	1, 2	115	860	0.133	114	106	0.1	0.2	4.688	A
		2	1	(1, 2, 3, 4)	254			254	254	0.0	0.0	0.001	A
	Exit	1	1		72			72	74	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	106	874	0.122	108	108	0.1	0.1	4.850	A
			2	2, 3	13	874	0.015	13	13	0.0	0.0	4.142	A
		2	1	(1, 2, 3, 4)	120			120	121	0.0	0.0	0.000	A
	Exit	1	1		229			229	237	0.0	0.0	0.000	A
4 - A42	Exit	1	1		283			283	292	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	229	969	0.237	227	239	0.4	0.5	6.887	A
			2	1, 4	212	969	0.219	214	211	0.4	0.3	6.220	A
		2	1	(1, 2, 3, 4)	440			440	451	0.0	0.0	0.264	A
	Exit	1	1		208			208	207	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	150	857	0.175	148	146	0.2	0.3	5.152	A
			2	1, 2	108	857	0.126	109	102	0.2	0.1	5.094	A
		2	1	(1, 2, 3, 4)	258			258	248	0.0	0.0	0.000	A
	Exit	1	1		73			73	74	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	103	869	0.119	103	109	0.1	0.2	4.754	A
			2	2, 3	13	869	0.015	13	13	0.0	0.0	3.554	A
		2	1	(1, 2, 3, 4)	117			117	122	0.0	0.0	0.000	A
	Exit	1	1		228			228	236	0.0	0.0	0.000	A
4 - A42	Exit	1	1		306			306	303	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	186	970	0.192	186	194	0.5	0.3	6.588	A
			2	1, 4	163	970	0.169	164	167	0.3	0.3	6.257	A
		2	1	(1, 2, 3, 4)	349			350	360	0.0	0.0	0.194	A
	Exit	1	1		175			175	177	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	120	882	0.136	120	121	0.3	0.1	4.972	A
			2	1, 2	91	882	0.103	91	87	0.1	0.1	4.532	A
		2	1	(1, 2, 3, 4)	211			211	208	0.0	0.0	0.000	A
	Exit	1	1		60			60	59	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	87	896	0.097	86	92	0.2	0.2	4.690	A
			2	2, 3	10	896	0.012	11	10	0.0	0.0	4.190	A
		2	1	(1, 2, 3, 4)	97			97	102	0.0	0.0	0.000	A
	Exit	1	1		185			185	195	0.0	0.0	0.000	A
4 - A42	Exit	1	1		238			238	240	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	156	971	0.161	154	158	0.3	0.4	6.051	A
			2	1, 4	132	971	0.136	133	139	0.3	0.2	5.470	A
		2	1	(1, 2, 3, 4)	289			289	297	0.0	0.0	0.091	A
	Exit	1	1		140			140	148	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	97	898	0.108	96	100	0.1	0.1	4.484	A
			2	1, 2	74	898	0.083	74	75	0.1	0.1	4.213	A
		2	1	(1, 2, 3, 4)	171			171	175	0.0	0.0	0.000	A
	Exit	1	1		44			44	49	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	68	916	0.074	68	74	0.2	0.1	4.509	A
			2	2, 3	8	916	0.009	8	8	0.0	0.0	3.703	A
		2	1	(1, 2, 3, 4)	76			76	82	0.0	0.0	0.000	A
	Exit	1	1		158			158	158	0.0	0.0	0.000	A
4 - A42	Exit	1	1		192			192	201	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	973	970	0.042	40	41	0.0	0.1	6.284	A
				3	116	29	973	970	0.120	117	122	0.0	0.2	6.478	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	129	32	973	969	0.133	131	136	0.0	0.2	6.219	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	-	-	-	41	42	0.0	0.0	0.187	A
				3	116	29	-	-	-	116	123	0.0	0.0	0.220	A
				4	129	32	-	-	-	129	137	0.0	0.0	0.125	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	39	10	978	898	0.044	40	41	0.0	0.0	4.303	A
				4	54	14	978	902	0.060	54	57	0.0	0.1	4.795	A
			2	1	73	18	978	900	0.081	74	71	0.0	0.1	4.339	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	73	18	-	-	-	73	71	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	39	10	-	-	-	39	41	0.0	0.0	0.000	A
				4	54	14	-	-	-	54	57	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	64	16	1001	918	0.070	65	69	0.0	0.0	4.186	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.69	449	408	0.007	3	2	0.0	0.0	4.421	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	10	3	924	845	0.012	10	10	0.0	0.0	4.180	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	64	16	-	-	-	64	69	0.0	0.0	0.000	A
				2	10	3	-	-	-	10	10	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.69	-	-	-	3	2	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	11	973	969	0.047	44	47	0.1	0.2	6.741	A
				3	145	36	973	969	0.150	147	141	0.2	0.2	6.577	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	177	44	973	969	0.182	179	172	0.2	0.3	6.083	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	11	-	-	-	46	47	0.0	0.0	0.139	A
				3	145	36	-	-	-	145	141	0.0	0.0	0.170	A
				4	176	44	-	-	-	177	172	0.0	0.0	0.096	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	46	12	978	876	0.053	46	48	0.0	0.1	4.741	A
				4	68	17	978	879	0.077	67	70	0.1	0.1	4.704	A
			2	1	86	21	978	877	0.098	86	83	0.1	0.1	4.249	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	86	21	-	-	-	86	83	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	46	12	-	-	-	46	48	0.0	0.0	0.000	A
				4	68	17	-	-	-	68	70	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	81	20	1001	896	0.091	81	88	0.0	0.1	4.308	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.58	462	417	0.006	2	2	0.0	0.0	5.023	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	12	3	962	866	0.014	13	12	0.0	0.0	3.940	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	81	20	-	-	-	81	88	0.0	0.0	0.000	A
				2	12	3	-	-	-	12	12	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.58	-	-	-	2	2	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	973	969	0.060	59	61	0.2	0.1	6.847	A
				3	173	43	973	969	0.178	173	174	0.2	0.3	6.793	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	199	50	973	969	0.205	197	205	0.3	0.4	6.151	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	-	-	-	59	61	0.0	0.0	0.327	A
				3	173	43	-	-	-	173	174	0.0	0.0	0.350	A
				4	199	50	-	-	-	199	205	0.0	0.0	0.257	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	56	14	978	861	0.065	56	63	0.1	0.1	5.072	A
				4	83	21	978	861	0.096	83	84	0.1	0.1	5.199	A
			2	1	115	29	978	862	0.133	114	106	0.1	0.2	4.688	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	115	29	-	-	-	115	107	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	56	14	-	-	-	56	63	0.0	0.0	0.002	A
				4	83	21	-	-	-	83	84	0.0	0.0	0.003	A
3 - Top Brand	Entry	1	1	1	104	26	1001	875	0.119	106	105	0.1	0.1	4.848	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.65	526	460	0.006	3	3	0.0	0.0	4.887	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	13	3	1001	876	0.015	13	13	0.0	0.0	4.142	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	104	26	-	-	-	104	104	0.0	0.0	0.000	A
				2	13	3	-	-	-	13	13	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.65	-	-	-	3	3	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	60	15	973	969	0.062	59	61	0.1	0.1	7.027	A
				3	170	42	973	969	0.175	167	178	0.3	0.4	6.839	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	212	53	973	969	0.219	214	211	0.4	0.3	6.220	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	60	15	-	-	-	60	61	0.0	0.0	0.225	A
				3	170	42	-	-	-	170	179	0.0	0.0	0.306	A
				4	212	53	-	-	-	212	211	0.0	0.0	0.239	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	61	15	978	857	0.071	61	58	0.1	0.1	5.209	A
				4	89	22	978	856	0.104	87	88	0.1	0.2	5.114	A
			2	1	108	27	978	857	0.126	109	102	0.2	0.1	5.094	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	108	27	-	-	-	108	102	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	61	15	-	-	-	61	58	0.0	0.0	0.000	A
				4	89	22	-	-	-	89	88	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	99	25	1001	869	0.114	99	105	0.1	0.1	4.725	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	642	559	0.007	4	4	0.0	0.0	5.537	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	13	3	975	850	0.016	13	13	0.0	0.0	3.554	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	99	25	-	-	-	99	105	0.0	0.0	0.000	A
				2	13	3	-	-	-	13	13	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	-	-	-	4	4	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	50	12	973	970	0.051	49	49	0.1	0.2	7.048	A
				3	137	34	973	970	0.141	137	145	0.4	0.1	6.428	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	163	41	973	970	0.169	164	167	0.3	0.3	6.257	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	50	12	-	-	-	50	49	0.0	0.0	0.251	A
				3	137	34	-	-	-	137	144	0.0	0.0	0.239	A
				4	163	41	-	-	-	163	167	0.0	0.0	0.139	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	49	12	978	882	0.055	48	50	0.1	0.1	4.920	A
				4	72	18	978	883	0.081	72	71	0.2	0.1	5.009	A
			2	1	91	23	978	879	0.104	91	87	0.1	0.1	4.532	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	91	23	-	-	-	91	87	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	49	12	-	-	-	49	50	0.0	0.0	0.000	A
				4	72	18	-	-	-	72	71	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	84	21	1001	895	0.094	83	90	0.1	0.2	4.673	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.62	449	403	0.006	2	2	0.0	0.0	5.382	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	10	3	950	851	0.012	11	10	0.0	0.0	4.190	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	84	21	-	-	-	84	90	0.0	0.0	0.000	A
				2	10	3	-	-	-	10	10	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.62	-	-	-	2	2	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	9	973	971	0.039	36	40	0.2	0.2	5.906	A
				3	118	30	973	971	0.122	118	117	0.1	0.3	6.100	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	132	33	973	971	0.136	133	139	0.3	0.2	5.470	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	9	-	-	-	38	40	0.0	0.0	0.076	A
				3	118	30	-	-	-	118	118	0.0	0.0	0.131	A
				4	132	33	-	-	-	132	139	0.0	0.0	0.061	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	40	10	978	897	0.044	40	40	0.1	0.1	4.321	A
				4	57	14	978	898	0.063	57	59	0.1	0.1	4.594	A
			2	1	74	19	978	899	0.083	74	75	0.1	0.1	4.213	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	74	19	-	-	-	74	75	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	40	10	-	-	-	40	40	0.0	0.0	0.000	A
				4	57	14	-	-	-	57	60	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	66	16	1001	915	0.072	65	72	0.2	0.1	4.493	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.54	423	386	0.006	2	2	0.0	0.0	5.047	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	8	2	885	811	0.010	8	8	0.0	0.0	3.703	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	66	16	-	-	-	66	72	0.0	0.0	0.000	A
				2	8	2	-	-	-	8	8	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.54	-	-	-	2	2	0.0	0.0	0.000	A

2038 | 2a WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	7.49	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.49	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2038	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	469	100.000
2 - Gelscoe Lane		ONE HOUR	✓	187	100.000
3 - Top Brand		ONE HOUR	✓	486	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	90	226	153
	2 - Gelscoe Lane	70	0	39	78
	3 - Top Brand	369	65	0	52
	4 - A42	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	1	13	4
	2 - Gelscoe Lane	0	0	2	2
	3 - Top Brand	8	0	0	72
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A453 (N)	0.37	6.07	0.9	A	428	642
2 - Gelscoe Lane	0.17	4.95	0.3	A	170	255
3 - Top Brand	0.51	9.83	1.5	A	445	667
4 - A42						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	367	92	51	1392	0.263	365	361	337	0.0	0.6	5.243	A
2 - Gelscoe Lane	141	35	293	1359	0.104	141	144	123	0.0	0.2	4.323	A
3 - Top Brand	373	93	228	1106	0.337	369	370	206	0.0	0.8	6.499	A
4 - A42			0					210				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	410	103	61	1391	0.295	411	424	396	0.6	0.6	5.611	A
2 - Gelscoe Lane	163	41	338	1371	0.119	165	172	134	0.2	0.1	4.689	A
3 - Top Brand	440	110	272	1115	0.395	440	450	232	0.8	1.1	7.455	A
4 - A42			0					255				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	512	128	70	1424	0.360	512	518	479	0.6	0.9	6.070	A
2 - Gelscoe Lane	207	52	415	1271	0.163	208	219	168	0.1	0.3	4.952	A
3 - Top Brand	530	133	335	1042	0.509	532	534	287	1.1	1.5	8.925	A
4 - A42			0					318				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	512	128	68	1374	0.373	514	518	475	0.9	0.9	5.971	A
2 - Gelscoe Lane	204	51	412	1215	0.168	204	211	170	0.3	0.2	4.942	A
3 - Top Brand	526	132	321	1040	0.506	531	542	295	1.5	1.2	9.828	A
4 - A42			0					308				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	425	106	52	1363	0.312	423	431	396	0.9	0.8	5.375	A
2 - Gelscoe Lane	165	41	342	1368	0.121	166	178	133	0.2	0.2	4.790	A
3 - Top Brand	435	109	271	1046	0.416	438	446	237	1.2	0.8	7.450	A
4 - A42			0					260				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	341	85	46	1364	0.250	339	355	327	0.8	0.6	5.373	A
2 - Gelscoe Lane	139	35	269	1410	0.099	139	147	116	0.2	0.1	4.586	A
3 - Top Brand	362	91	218	1067	0.340	363	372	191	0.8	0.6	6.767	A
4 - A42			0					207				

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	248	957	0.259	247	245	0.0	0.4	5.543	A
			2	1, 4	118	957	0.123	118	115	0.0	0.1	4.272	A
		2	1	(1, 2, 3, 4)	367			366	363	0.0	0.0	0.118	A
	Exit	1	1		337			337	338	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	88	885	0.100	88	90	0.0	0.1	4.495	A
			2	1, 2	53	885	0.060	53	54	0.0	0.1	4.044	A
		2	1	(1, 2, 3, 4)	141			141	145	0.0	0.0	0.000	A
	Exit	1	1		123			123	120	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	322	927	0.347	319	320	0.0	0.7	6.709	A
			2	2, 3	50	927	0.054	51	49	0.0	0.0	3.955	A
		2	1	(1, 2, 3, 4)	373			372	373	0.0	0.1	0.189	A
	Exit	1	1		206			206	205	0.0	0.0	0.000	A
4 - A42	Exit	1	1		210			210	212	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	269	954	0.282	270	284	0.4	0.4	5.895	A
			2	1, 4	141	954	0.148	141	140	0.1	0.2	4.735	A
		2	1	(1, 2, 3, 4)	410			410	424	0.0	0.0	0.116	A
	Exit	1	1		396			396	403	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	103	871	0.118	104	107	0.1	0.1	4.933	A
			2	1, 2	61	871	0.070	61	65	0.1	0.1	4.295	A
		2	1	(1, 2, 3, 4)	163			163	172	0.0	0.0	0.000	A
	Exit	1	1		134			134	144	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	379	914	0.415	379	387	0.7	1.0	7.721	A
			2	2, 3	61	914	0.067	61	63	0.0	0.1	4.038	A
		2	1	(1, 2, 3, 4)	440			440	451	0.1	0.0	0.311	A
	Exit	1	1		232			232	238	0.0	0.0	0.000	A
4 - A42	Exit	1	1		255			255	260	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	336	951	0.354	338	347	0.4	0.5	6.430	A
			2	1, 4	176	951	0.185	174	170	0.2	0.4	4.758	A
		2	1	(1, 2, 3, 4)	512			512	519	0.0	0.0	0.205	A
	Exit	1	1		479			479	485	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	133	846	0.158	134	141	0.1	0.2	5.052	A
			2	1, 2	74	846	0.087	73	78	0.1	0.1	4.776	A
		2	1	(1, 2, 3, 4)	207			207	219	0.0	0.0	0.000	A
	Exit	1	1		168			168	172	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	460	893	0.515	462	462	1.0	1.3	8.845	A
			2	2, 3	71	893	0.079	70	71	0.1	0.1	4.325	A
		2	1	(1, 2, 3, 4)	530			530	535	0.0	0.1	0.747	A
	Exit	1	1		287			287	295	0.0	0.0	0.000	A
4 - A42	Exit	1	1		318			318	318	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	348	951	0.365	350	346	0.5	0.6	6.318	A
			2	1, 4	165	951	0.173	164	172	0.4	0.2	4.744	A
		2	1	(1, 2, 3, 4)	512			512	518	0.0	0.0	0.196	A
	Exit	1	1		475			475	488	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	132	847	0.156	133	134	0.2	0.1	4.995	A
			2	1, 2	72	847	0.085	71	77	0.1	0.1	4.852	A
		2	1	(1, 2, 3, 4)	204			204	211	0.0	0.0	0.000	A
	Exit	1	1		170			170	169	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	460	898	0.512	462	472	1.3	1.1	9.517	A
			2	2, 3	68	898	0.075	68	71	0.1	0.0	4.334	A
		2	1	(1, 2, 3, 4)	526			528	542	0.1	0.0	1.068	A
	Exit	1	1		295			295	293	0.0	0.0	0.000	A
4 - A42	Exit	1	1		308			308	321	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	284	956	0.297	282	289	0.6	0.6	5.712	A
			2	1, 4	140	956	0.147	141	142	0.2	0.2	4.473	A
		2	1	(1, 2, 3, 4)	425			425	431	0.0	0.0	0.082	A
	Exit	1	1		396			396	408	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	104	869	0.120	105	112	0.1	0.1	4.859	A
			2	1, 2	61	869	0.070	61	66	0.1	0.1	4.678	A
		2	1	(1, 2, 3, 4)	165			165	178	0.0	0.0	0.000	A
	Exit	1	1		133			133	140	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	384	914	0.421	385	389	1.1	0.8	7.636	A
			2	2, 3	52	914	0.057	52	57	0.0	0.1	4.520	A
		2	1	(1, 2, 3, 4)	435			436	445	0.0	0.0	0.262	A
	Exit	1	1		237			237	244	0.0	0.0	0.000	A
4 - A42	Exit	1	1		260			260	264	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	233	958	0.243	232	240	0.6	0.4	5.642	A
			2	1, 4	107	958	0.112	107	114	0.2	0.2	4.478	A
		2	1	(1, 2, 3, 4)	341			341	354	0.0	0.0	0.118	A
	Exit	1	1		327			327	338	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	88	892	0.098	88	92	0.1	0.1	4.818	A
			2	1, 2	51	892	0.058	51	55	0.1	0.1	4.200	A
		2	1	(1, 2, 3, 4)	139			139	147	0.0	0.0	0.000	A
	Exit	1	1		116			116	115	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	316	931	0.339	317	325	0.8	0.5	7.004	A
			2	2, 3	47	931	0.050	46	47	0.1	0.1	4.063	A
		2	1	(1, 2, 3, 4)	362			362	371	0.0	0.0	0.178	A
	Exit	1	1		191			191	203	0.0	0.0	0.000	A
4 - A42	Exit	1	1		207			207	218	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	973	958	0.076	72	71	0.0	0.1	5.262	A
				3	175	44	973	957	0.183	175	174	0.0	0.3	5.671	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	118	29	973	958	0.123	118	115	0.0	0.1	4.272	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	-	-	-	73	71	0.0	0.0	0.171	A
				3	175	44	-	-	-	175	176	0.0	0.0	0.131	A
				4	118	30	-	-	-	118	116	0.0	0.0	0.067	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	8	978	887	0.034	30	30	0.0	0.0	4.563	A
				4	58	14	978	887	0.065	58	60	0.0	0.1	4.461	A
			2	1	53	13	978	887	0.060	53	54	0.0	0.1	4.044	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	53	13	-	-	-	53	54	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	8	-	-	-	30	30	0.0	0.0	0.000	A
				4	58	14	-	-	-	58	60	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	287	72	1001	927	0.309	284	284	0.0	0.6	6.522	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	35	9	1001	926	0.038	35	37	0.0	0.1	8.987	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	50	13	1001	927	0.054	51	49	0.0	0.0	3.955	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	287	72	-	-	-	287	286	0.0	0.1	0.211	A
				2	50	13	-	-	-	50	50	0.0	0.0	0.122	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	35	9	-	-	-	35	37	0.0	0.0	0.075	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	973	954	0.077	73	82	0.1	0.1	5.658	A
				3	196	49	973	953	0.206	197	202	0.3	0.3	6.002	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	141	35	973	954	0.148	141	140	0.1	0.2	4.735	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	-	-	-	73	82	0.0	0.0	0.165	A
				3	196	49	-	-	-	196	202	0.0	0.0	0.134	A
				4	141	35	-	-	-	141	140	0.0	0.0	0.062	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	978	871	0.040	35	36	0.0	0.0	4.707	A
				4	67	17	978	870	0.078	69	71	0.1	0.1	5.047	A
			2	1	61	15	978	870	0.070	61	65	0.1	0.1	4.295	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	61	15	-	-	-	61	65	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	-	-	-	35	36	0.0	0.0	0.000	A
				4	67	17	-	-	-	67	71	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	333	83	1001	913	0.365	335	338	0.6	0.8	7.485	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	46	12	1001	915	0.051	45	49	0.1	0.2	10.300	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	61	15	1001	914	0.067	61	63	0.0	0.1	4.038	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	333	83	-	-	-	333	339	0.1	0.0	0.357	A
				2	61	15	-	-	-	61	63	0.0	0.0	0.086	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	46	12	-	-	-	46	49	0.0	0.0	0.308	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	97	24	973	950	0.102	97	100	0.1	0.2	6.199	A
				3	239	60	973	951	0.251	241	247	0.3	0.4	6.535	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	176	44	973	950	0.185	174	170	0.2	0.4	4.758	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	97	24	-	-	-	97	101	0.0	0.0	0.254	A
				3	239	60	-	-	-	239	247	0.0	0.0	0.251	A
				4	176	44	-	-	-	176	171	0.0	0.0	0.112	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	46	12	978	847	0.055	46	48	0.0	0.1	5.075	A
				4	87	22	978	845	0.103	88	92	0.1	0.1	5.040	A
			2	1	74	18	978	845	0.087	73	78	0.1	0.1	4.776	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	74	18	-	-	-	74	78	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	46	12	-	-	-	46	49	0.0	0.0	0.000	A
				4	87	22	-	-	-	87	92	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	404	101	1001	894	0.452	406	407	0.8	1.1	8.588	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	56	14	1001	893	0.063	56	56	0.2	0.2	11.842	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	71	18	1001	892	0.079	70	71	0.1	0.1	4.325	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	403	101	-	-	-	404	408	0.0	0.0	0.780	A
				2	71	18	-	-	-	71	71	0.0	0.0	0.564	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	56	14	-	-	-	56	55	0.0	0.0	0.764	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	100	25	973	951	0.105	101	98	0.2	0.1	6.083	A
				3	248	62	973	951	0.260	248	248	0.4	0.5	6.423	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	165	41	973	952	0.173	164	172	0.4	0.2	4.744	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	100	25	-	-	-	100	98	0.0	0.0	0.210	A
				3	247	62	-	-	-	248	248	0.0	0.0	0.245	A
				4	165	41	-	-	-	165	172	0.0	0.0	0.123	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	47	12	978	845	0.055	47	45	0.1	0.0	4.946	A
				4	85	21	978	845	0.101	85	89	0.1	0.1	5.020	A
			2	1	72	18	978	845	0.085	71	77	0.1	0.1	4.852	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	72	18	-	-	-	72	77	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	47	12	-	-	-	47	45	0.0	0.0	0.000	A
				4	85	21	-	-	-	85	89	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	402	100	1001	898	0.448	403	412	1.1	1.0	9.275	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	58	14	1001	897	0.065	59	60	0.2	0.1	12.196	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	68	17	1001	898	0.075	68	71	0.1	0.0	4.334	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	401	100	-	-	-	402	411	0.0	0.0	1.077	A
				2	67	17	-	-	-	68	71	0.0	0.0	1.030	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	58	15	-	-	-	58	60	0.0	0.0	1.054	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	81	20	973	956	0.084	81	82	0.1	0.1	5.349	A
				3	203	51	973	956	0.213	201	207	0.5	0.5	5.873	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	140	35	973	956	0.147	141	142	0.2	0.2	4.473	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	81	20	-	-	-	81	82	0.0	0.0	0.092	A
				3	204	51	-	-	-	203	207	0.0	0.0	0.109	A
				4	140	35	-	-	-	140	142	0.0	0.0	0.041	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	978	869	0.040	35	38	0.0	0.0	5.018	A
				4	70	17	978	869	0.080	70	74	0.1	0.1	4.779	A
			2	1	61	15	978	870	0.070	61	66	0.1	0.1	4.678	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	61	15	-	-	-	61	66	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	-	-	-	35	37	0.0	0.0	0.000	A
				4	70	17	-	-	-	70	74	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	334	84	1001	913	0.366	335	342	1.0	0.7	7.413	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	50	12	1001	910	0.054	50	48	0.1	0.1	10.182	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	1001	914	0.057	52	57	0.0	0.1	4.520	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	334	83	-	-	-	334	341	0.0	0.0	0.273	A
				2	52	13	-	-	-	52	57	0.0	0.0	0.121	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	50	12	-	-	-	50	47	0.0	0.0	0.426	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	71	18	973	958	0.074	69	68	0.1	0.2	5.432	A
				3	163	41	973	958	0.170	162	173	0.5	0.3	5.734	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	107	27	973	958	0.112	107	114	0.2	0.2	4.478	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	71	18	-	-	-	71	68	0.0	0.0	0.115	A
				3	163	41	-	-	-	163	172	0.0	0.0	0.154	A
				4	107	27	-	-	-	107	114	0.0	0.0	0.070	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	29	7	978	893	0.032	29	31	0.0	0.0	4.953	A
				4	59	15	978	892	0.066	59	62	0.1	0.0	4.751	A
			2	1	51	13	978	890	0.058	51	55	0.1	0.1	4.200	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	51	13	-	-	-	51	55	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	29	7	-	-	-	29	31	0.0	0.0	0.000	A
				4	59	15	-	-	-	59	62	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	275	69	1001	931	0.296	276	283	0.7	0.5	6.796	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	40	10	991	921	0.044	41	42	0.1	0.1	9.205	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	1001	930	0.050	46	47	0.1	0.1	4.063	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	275	69	-	-	-	275	282	0.0	0.0	0.191	A
				2	47	12	-	-	-	47	47	0.0	0.0	0.103	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	40	10	-	-	-	40	42	0.0	0.0	0.188	A

2038 | 2a WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.29	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.29	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2038	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	458	100.000
2 - Gelscoe Lane		ONE HOUR	✓	394	100.000
3 - Top Brand		ONE HOUR	✓	228	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	62	181	215
	2 - Gelscoe Lane	165	0	93	136
	3 - Top Brand	195	26	0	7
	4 - A42	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	23	23	23
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	3	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A453 (N)	0.36	6.74	1.3	A	419	629
2 - Gelscoe Lane	0.33	5.88	0.9	A	357	536
3 - Top Brand	0.28	6.11	0.6	A	210	315
4 - A42						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	335	84	18	1502	0.223	335	345	274	0.0	0.6	5.550	A
2 - Gelscoe Lane	298	74	292	1477	0.202	299	297	61	0.0	0.5	4.941	A
3 - Top Brand	171	43	390	982	0.175	170	170	202	0.0	0.3	5.099	A
4 - A42			0					268				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	418	104	21	1451	0.288	414	420	327	0.6	1.0	6.051	A
2 - Gelscoe Lane	350	87	360	1404	0.249	350	361	75	0.5	0.5	5.195	A
3 - Top Brand	210	52	458	956	0.220	210	216	252	0.3	0.3	5.256	A
4 - A42			0					322				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	510	127	28	1417	0.360	506	510	391	1.0	1.3	6.745	A
2 - Gelscoe Lane	419	105	433	1431	0.292	418	437	101	0.5	0.7	5.730	A
3 - Top Brand	250	62	556	919	0.272	249	257	295	0.3	0.6	5.915	A
4 - A42			0					386				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	502	125	28	1442	0.348	503	517	390	1.3	1.1	6.373	A
2 - Gelscoe Lane	431	108	444	1307	0.330	427	438	88	0.7	0.9	5.876	A
3 - Top Brand	248	62	562	900	0.275	249	253	309	0.6	0.4	6.106	A
4 - A42			0					394				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	407	102	21	1484	0.274	406	420	326	1.1	0.7	6.116	A
2 - Gelscoe Lane	356	89	349	1419	0.251	356	360	78	0.9	0.5	5.422	A
3 - Top Brand	203	51	465	995	0.204	203	211	241	0.4	0.3	5.796	A
4 - A42			0					320				

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	344	86	20	1486	0.232	347	349	271	0.7	0.4	5.634	A
2 - Gelscoe Lane	290	72	303	1423	0.203	288	300	64	0.5	0.5	4.952	A
3 - Top Brand	178	45	390	983	0.181	178	181	201	0.3	0.3	5.197	A
4 - A42			0					278				

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	173	967	0.179	173	179	0.0	0.4	5.665	A
			2	1, 4	162	967	0.167	162	165	0.0	0.2	5.256	A
		2	1	(1, 2, 3, 4)	335			335	347	0.0	0.0	0.082	A
	Exit	1	1		274			274	269	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	171	885	0.193	172	174	0.0	0.3	5.036	A
			2	1, 2	127	885	0.143	127	123	0.0	0.2	4.808	A
		2	1	(1, 2, 3, 4)	298			298	299	0.0	0.0	0.000	A
	Exit	1	1		61			61	61	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	153	876	0.175	152	152	0.0	0.3	5.216	A
			2	2, 3	18	876	0.021	18	18	0.0	0.0	4.118	A
		2	1	(1, 2, 3, 4)	171			171	171	0.0	0.0	0.001	A
	Exit	1	1		202			202	206	0.0	0.0	0.000	A
4 - A42	Exit	1	1		268			268	275	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	224	966	0.231	222	227	0.4	0.6	6.099	A
			2	1, 4	194	966	0.200	192	193	0.2	0.4	5.637	A
		2	1	(1, 2, 3, 4)	418			417	421	0.0	0.0	0.164	A
	Exit	1	1		327			327	338	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	206	864	0.239	206	209	0.3	0.3	5.380	A
			2	1, 2	144	864	0.166	144	152	0.2	0.2	4.930	A
		2	1	(1, 2, 3, 4)	350			350	361	0.0	0.0	0.004	A
	Exit	1	1		75			75	81	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	188	854	0.221	189	192	0.3	0.2	5.405	A
			2	2, 3	21	854	0.025	21	23	0.0	0.0	4.057	A
		2	1	(1, 2, 3, 4)	210			210	215	0.0	0.0	0.000	A
	Exit	1	1		252			252	253	0.0	0.0	0.000	A
4 - A42	Exit	1	1		322			322	324	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	274	964	0.284	272	274	0.6	0.6	6.500	A
			2	1, 4	235	964	0.244	234	235	0.4	0.6	6.310	A
		2	1	(1, 2, 3, 4)	510			509	511	0.0	0.1	0.333	A
	Exit	1	1		391			391	405	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	240	840	0.285	241	253	0.3	0.4	5.870	A
			2	1, 2	179	840	0.213	177	185	0.2	0.3	5.529	A
		2	1	(1, 2, 3, 4)	419			419	438	0.0	0.0	0.004	A
	Exit	1	1		101			101	101	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	221	822	0.269	221	228	0.2	0.5	6.128	A
			2	2, 3	29	822	0.035	28	29	0.0	0.1	4.237	A
		2	1	(1, 2, 3, 4)	250			250	258	0.0	0.0	0.005	A
	Exit	1	1		295			295	305	0.0	0.0	0.000	A
4 - A42	Exit	1	1		386			386	393	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	261	964	0.271	263	267	0.6	0.5	6.110	A
			2	1, 4	240	964	0.249	240	250	0.6	0.5	6.111	A
		2	1	(1, 2, 3, 4)	502			501	517	0.1	0.1	0.264	A
	Exit	1	1		390			390	397	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	255	837	0.305	252	257	0.4	0.6	6.179	A
			2	1, 2	176	837	0.210	176	181	0.3	0.3	5.430	A
		2	1	(1, 2, 3, 4)	431			431	439	0.0	0.0	0.004	A
	Exit	1	1		88			88	95	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	219	820	0.268	221	223	0.5	0.3	6.308	A
			2	2, 3	28	820	0.034	28	30	0.1	0.0	4.212	A
		2	1	(1, 2, 3, 4)	248			248	253	0.0	0.0	0.051	A
	Exit	1	1		309			309	309	0.0	0.0	0.000	A
4 - A42	Exit	1	1		394			394	407	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	216	966	0.223	215	223	0.5	0.3	6.091	A
			2	1, 4	191	966	0.198	191	197	0.5	0.4	5.890	A
		2	1	(1, 2, 3, 4)	407			407	419	0.1	0.0	0.121	A
	Exit	1	1		326			326	333	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	206	867	0.238	206	210	0.6	0.3	5.578	A
			2	1, 2	150	867	0.173	150	151	0.3	0.2	5.191	A
		2	1	(1, 2, 3, 4)	356			356	358	0.0	0.0	0.006	A
	Exit	1	1		78			78	78	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	181	852	0.213	181	188	0.3	0.3	5.910	A
			2	2, 3	22	852	0.025	21	22	0.0	0.0	4.705	A
		2	1	(1, 2, 3, 4)	203			203	210	0.0	0.0	0.019	A
	Exit	1	1		241			241	251	0.0	0.0	0.000	A
4 - A42	Exit	1	1		320			320	328	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	181	967	0.187	184	187	0.3	0.2	5.609	A
			2	1, 4	163	967	0.169	163	162	0.4	0.3	5.487	A
		2	1	(1, 2, 3, 4)	344			344	348	0.0	0.0	0.082	A
	Exit	1	1		271			271	282	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	171	882	0.194	170	172	0.3	0.4	5.096	A
			2	1, 2	119	882	0.135	118	128	0.2	0.2	4.757	A
		2	1	(1, 2, 3, 4)	290			290	301	0.0	0.0	0.000	A
	Exit	1	1		64			64	68	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	158	876	0.181	158	160	0.3	0.2	5.345	A
			2	2, 3	20	876	0.023	20	21	0.0	0.1	4.106	A
		2	1	(1, 2, 3, 4)	178			178	181	0.0	0.0	0.000	A
	Exit	1	1		201			201	206	0.0	0.0	0.000	A
4 - A42	Exit	1	1		278			278	274	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	43	11	973	967	0.044	42	43	0.0	0.1	5.119	A
				3	130	32	973	967	0.134	131	136	0.0	0.3	5.836	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	162	40	973	967	0.167	162	165	0.0	0.2	5.256	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	43	11	-	-	-	43	43	0.0	0.0	0.064	A
				3	130	32	-	-	-	130	137	0.0	0.0	0.119	A
				4	162	40	-	-	-	162	166	0.0	0.0	0.056	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	72	18	978	884	0.081	72	70	0.0	0.1	5.139	A
				4	99	25	978	884	0.112	100	103	0.0	0.2	4.967	A
			2	1	127	32	978	885	0.143	127	123	0.0	0.2	4.808	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	127	32	-	-	-	127	124	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	72	18	-	-	-	72	71	0.0	0.0	0.000	A
				4	99	25	-	-	-	99	104	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	147	37	1001	877	0.168	147	146	0.0	0.3	5.241	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	6	1	812	708	0.008	6	6	0.0	0.0	4.665	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	18	5	1001	876	0.021	18	18	0.0	0.0	4.118	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	147	37	-	-	-	147	147	0.0	0.0	0.001	A
				2	18	5	-	-	-	18	18	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	6	1	-	-	-	6	6	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	973	966	0.057	54	58	0.1	0.1	6.173	A
				3	169	42	973	967	0.175	168	169	0.3	0.4	6.074	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	194	48	973	966	0.200	192	193	0.2	0.4	5.637	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	-	-	-	55	58	0.0	0.0	0.189	A
				3	169	42	-	-	-	169	170	0.0	0.0	0.170	A
				4	194	48	-	-	-	194	194	0.0	0.0	0.152	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	84	21	978	864	0.098	84	83	0.1	0.1	5.250	A
				4	122	30	978	863	0.141	122	125	0.2	0.2	5.467	A
			2	1	144	36	978	863	0.166	144	152	0.2	0.2	4.930	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	144	36	-	-	-	144	152	0.0	0.0	0.002	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	84	21	-	-	-	84	83	0.0	0.0	0.008	A
				4	122	30	-	-	-	122	125	0.0	0.0	0.004	A
3 - Top Brand	Entry	1	1	1	182	45	1001	854	0.213	183	186	0.3	0.2	5.395	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	836	713	0.009	7	7	0.0	0.0	5.691	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	21	5	1001	853	0.025	21	23	0.0	0.0	4.057	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	182	45	-	-	-	182	186	0.0	0.0	0.000	A
				2	21	5	-	-	-	21	23	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	-	-	-	7	6	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	973	965	0.076	73	72	0.1	0.1	6.553	A
				3	201	50	973	964	0.208	199	203	0.4	0.4	6.481	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	235	59	973	964	0.244	234	235	0.4	0.6	6.310	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	-	-	-	73	72	0.0	0.0	0.332	A
				3	201	50	-	-	-	201	203	0.0	0.0	0.308	A
				4	236	59	-	-	-	235	236	0.0	0.0	0.354	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	94	24	978	840	0.112	95	103	0.1	0.1	5.807	A
				4	145	36	978	842	0.173	145	150	0.2	0.2	5.914	A
			2	1	179	45	978	842	0.213	177	185	0.2	0.3	5.529	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	179	45	-	-	-	179	185	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	94	24	-	-	-	94	103	0.0	0.0	0.010	A
				4	145	36	-	-	-	145	150	0.0	0.0	0.006	A
3 - Top Brand	Entry	1	1	1	213	53	1001	823	0.259	213	220	0.2	0.5	6.134	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	860	707	0.011	7	8	0.0	0.0	5.966	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	29	7	1001	826	0.035	28	29	0.0	0.1	4.237	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	213	53	-	-	-	213	221	0.0	0.0	0.006	A
				2	29	7	-	-	-	29	29	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	-	-	-	7	8	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	973	963	0.061	59	65	0.1	0.1	6.040	A
				3	202	51	973	964	0.210	204	202	0.4	0.4	6.133	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	240	60	973	964	0.249	240	250	0.6	0.5	6.111	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	-	-	-	59	65	0.0	0.0	0.219	A
				3	202	51	-	-	-	202	202	0.0	0.0	0.266	A
				4	241	60	-	-	-	240	250	0.0	0.1	0.274	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	107	27	978	839	0.127	105	107	0.1	0.3	6.175	A
				4	148	37	978	839	0.177	147	151	0.2	0.3	6.182	A
			2	1	176	44	978	839	0.210	176	181	0.3	0.3	5.430	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	176	44	-	-	-	176	180	0.0	0.0	0.002	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	107	27	-	-	-	107	107	0.0	0.0	0.009	A
				4	148	37	-	-	-	148	151	0.0	0.0	0.004	A
3 - Top Brand	Entry	1	1	1	213	53	1001	821	0.259	214	217	0.5	0.3	6.312	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	871	714	0.010	7	7	0.0	0.0	6.190	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	28	7	1001	817	0.034	28	30	0.1	0.0	4.212	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	212	53	-	-	-	213	216	0.0	0.0	0.056	A
				2	28	7	-	-	-	28	30	0.0	0.0	0.020	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	-	-	-	7	7	0.0	0.0	0.035	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	57	14	973	967	0.059	57	56	0.1	0.1	6.009	A
				3	159	40	973	966	0.164	158	167	0.4	0.2	6.118	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	191	48	973	966	0.198	191	197	0.5	0.4	5.890	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	57	14	-	-	-	57	56	0.0	0.0	0.089	A
				3	159	40	-	-	-	159	166	0.0	0.0	0.114	A
				4	191	48	-	-	-	191	197	0.1	0.0	0.136	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	82	21	978	865	0.095	82	84	0.3	0.1	5.598	A
				4	124	31	978	866	0.143	124	125	0.3	0.1	5.564	A
			2	1	150	37	978	865	0.173	150	151	0.3	0.2	5.191	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	150	37	-	-	-	150	150	0.0	0.0	0.006	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	82	21	-	-	-	82	84	0.0	0.0	0.002	A
				4	124	31	-	-	-	124	124	0.0	0.0	0.010	A
3 - Top Brand	Entry	1	1	1	176	44	1001	851	0.207	176	183	0.3	0.3	5.916	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	5	1	742	628	0.009	5	6	0.0	0.0	5.717	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	5	1001	849	0.025	21	22	0.0	0.0	4.705	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	176	44	-	-	-	176	183	0.0	0.0	0.021	A
				2	22	5	-	-	-	22	22	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	5	1	-	-	-	5	5	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	973	967	0.045	44	47	0.1	0.0	5.612	A
				3	138	34	973	967	0.142	140	140	0.2	0.1	5.608	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	163	41	973	967	0.169	163	162	0.4	0.3	5.487	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	-	-	-	44	47	0.0	0.0	0.096	A
				3	138	34	-	-	-	138	139	0.0	0.0	0.088	A
				4	163	41	-	-	-	163	162	0.0	0.0	0.072	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	63	16	978	882	0.071	62	66	0.1	0.2	4.970	A
				4	108	27	978	882	0.123	109	106	0.1	0.2	5.176	A
			2	1	119	30	978	883	0.134	118	128	0.2	0.2	4.757	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	119	30	-	-	-	119	128	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	63	16	-	-	-	63	67	0.0	0.0	0.000	A
				4	108	27	-	-	-	108	106	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	153	38	1001	876	0.174	152	154	0.3	0.2	5.355	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	6	1	812	705	0.008	6	6	0.0	0.0	5.089	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	20	5	1001	878	0.023	20	21	0.0	0.1	4.106	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	153	38	-	-	-	153	154	0.0	0.0	0.000	A
				2	20	5	-	-	-	20	21	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	6	1	-	-	-	6	6	0.0	0.0	0.000	A

APPENDIX 57: Junction 12: M1 Junction 23 Stage 1A/2A Modelling Results

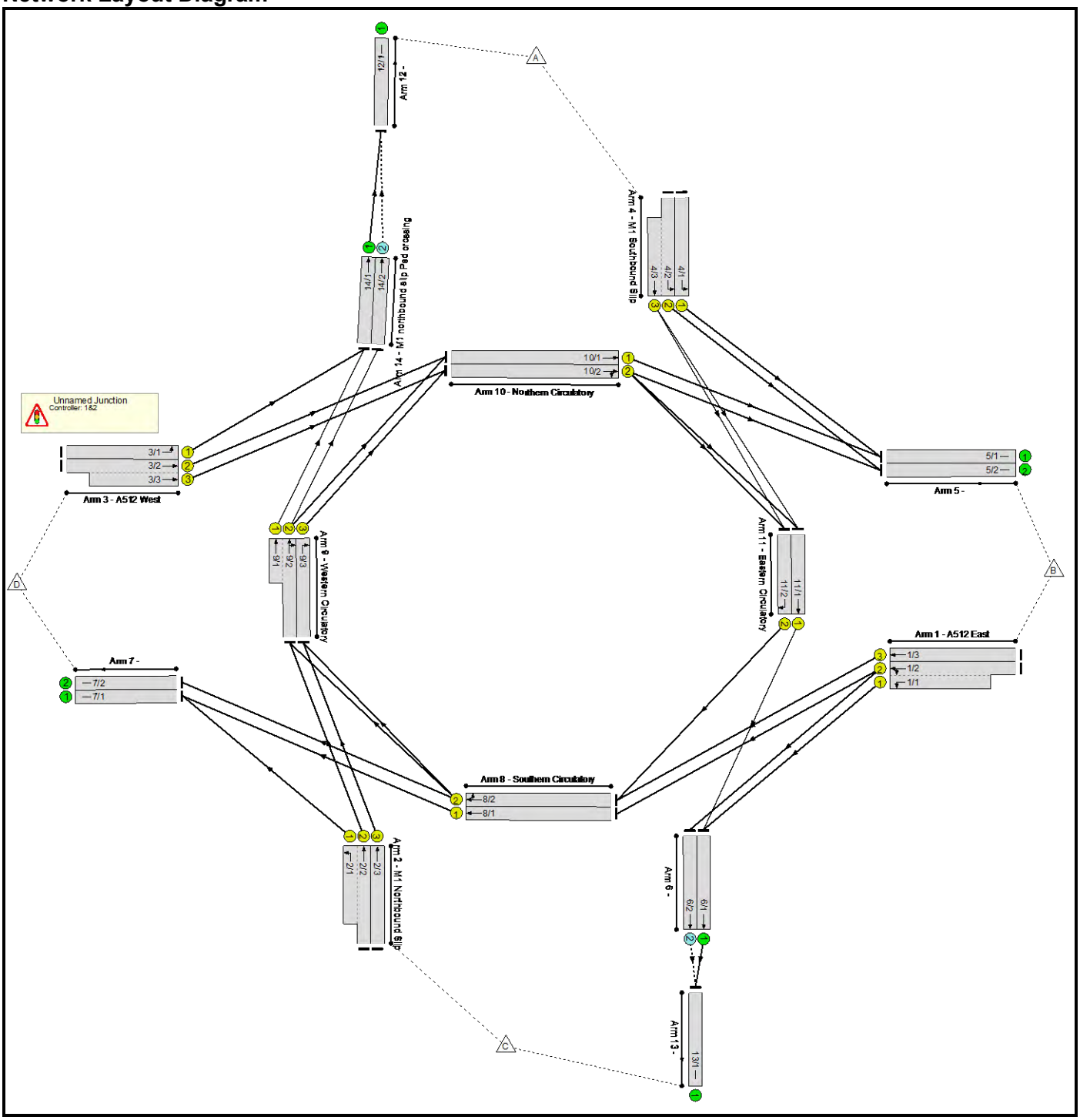
Full Input Data And Results

User and Project Details

Project:	**East Midlands Gateway 2**
Title:	**M1 Junction 23**
Location:	
Client:	SEGRO
Site Ref(s):	Junction 12
Date Started:	26/10/23
Checked By:	[redacted]
Additional detail:	
File name:	250619 M1 Junction 23_Stage 1a+2a.lsg3x
Author:	[redacted]
Company:	BWB
Address:	

Full Input Data And Results

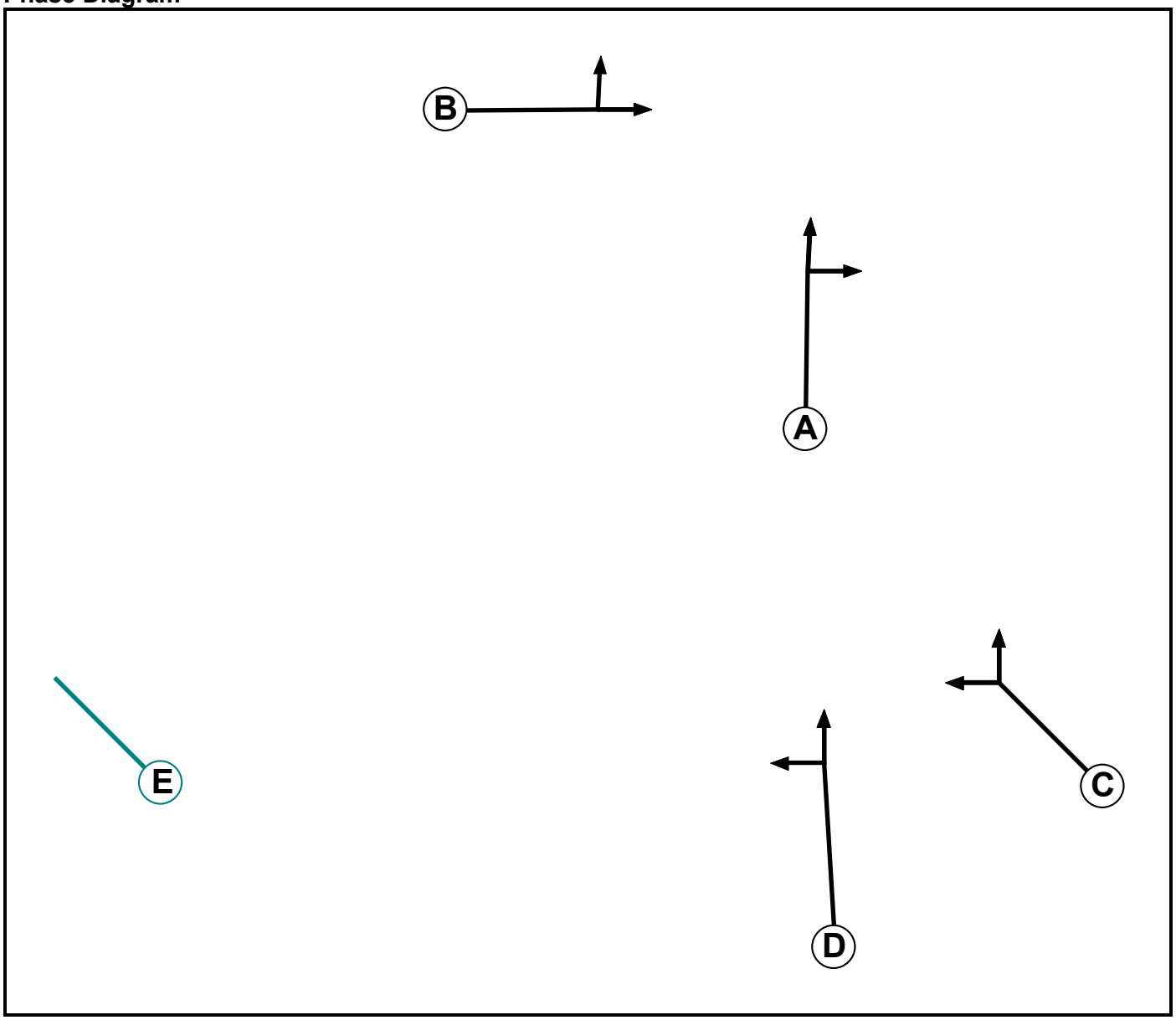
Network Layout Diagram



Full Input Data And Results

Controller :C1 - Westside 25911

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Dummy		4	4

Full Input Data And Results

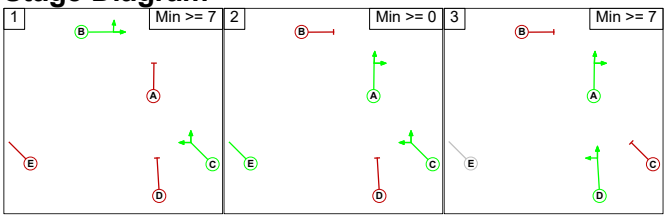
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
		A	B	C	D	E
	A		6	-	-	-
	B	6		-	-	6
	C	-	-		6	-
	D	-	-	7		-
	E	-	1	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	B C
2	A C E
3	A D

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
3	1	A	Losing	7	7

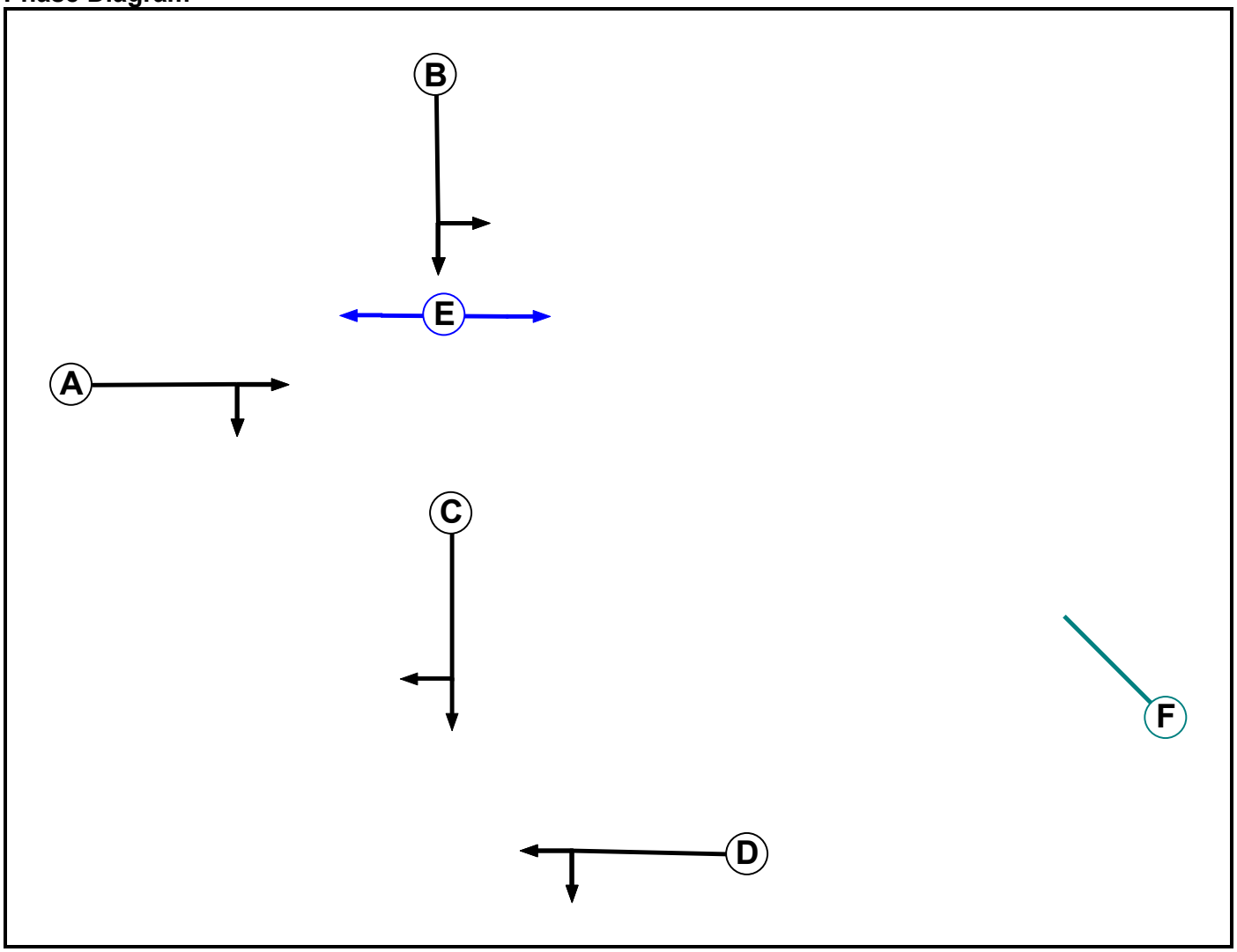
Prohibited Stage Change

From Stage	To Stage		
	1	2	3
1		6	6
2	6		6
3	13	7	

Full Input Data And Results

Controller :C2 - Eastside 25921

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		9	9
F	Dummy		4	4

Full Input Data And Results

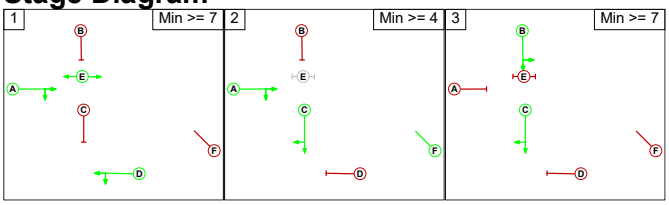
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
	A	B	C	D	E	F
A		6	-	-	-	-
B	7		-	-	5	7
C	-	-		6	-	-
D	-	-	6		-	6
E	-	10	-	-		-
F	-	1	-	1	-	

Phases in Stage

Stage No.	Phases in Stage
1	A D E
2	A C F
3	B C

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
3	1	C	Losing	7	7

Prohibited Stage Change

From Stage	To Stage			
	1	2	3
1		6	10
2	6		6
3	13	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
6/2	13/1 (Ahead)	715	0	6/1	0.22	All	-	-	-	-	-
14/2 (M1 northbound slip Ped crossing)	12/1 (Ahead)	715	0	14/1	0.22	All	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction												
Lane	**Lane Type**	**Phases**	**Start Disp. (s)**	**End Disp. (s)**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (A512 East)	U	D	2	3	16.0	Geom	-	3.75	0.00	Y	Arm 6 Left	110.00
1/2 (A512 East)	U	D	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 6 Left Arm 8 Ahead	Inf 71.00
1/3 (A512 East)	U	D	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 8 Ahead	85.00
2/1 (M1 Northbound Slip)	U	D	2	3	13.9	Geom	-	3.75	0.00	Y	Arm 7 Left	110.00
2/2 (M1 Northbound Slip)	U	D	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 9 Ahead	170.00
2/3 (M1 Northbound Slip)	U	D	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 9 Ahead	276.00
3/1 (A512 West)	U	B	2	3	18.3	Geom	-	3.75	0.00	Y	Arm 14 Left	45.00
3/2 (A512 West)	U	B	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 10 Ahead	55.00
3/3 (A512 West)	U	B	2	3	10.4	Geom	-	3.75	0.00	Y	Arm 10 Ahead	60.00
4/1 (M1 Southbound Slip)	U	B	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 5 Left	55.00
4/2 (M1 Southbound Slip)	U	B	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 5 Left	65.00
4/3 (M1 Southbound Slip)	U	B	2	3	14.8	Geom	-	3.75	0.00	Y	Arm 11 Ahead	70.00
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	17.4	Geom	-	3.65	0.00	Y	Arm 13 Ahead	Inf
6/2	O		2	3	17.4	Geom	-	3.65	0.00	Y	Arm 13 Ahead	Inf
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Southern Circulatory)	U	C	2	3	28.3	Geom	-	3.75	0.00	Y	Arm 7 Ahead	100.00

Full Input Data And Results

8/2 (Southern Circulatory)	U	C	2	3	28.0	Geom	-	3.75	0.00	Y	Arm 7 Ahead	100.00
											Arm 9 Right	45.00
9/1 (Western Circulatory)	U	A	2	3	4.9	Geom	-	3.75	0.00	Y	Arm 14 Ahead	60.00
9/2 (Western Circulatory)	U	A	2	3	12.8	Geom	-	3.75	0.00	Y	Arm 10 Right	45.00
											Arm 14 Ahead	45.00
9/3 (Western Circulatory)	U	A	2	3	11.6	Geom	-	3.75	0.00	Y	Arm 10 Right	50.00
10/1 (Northern Circulatory)	U	A	2	3	30.5	Geom	-	3.75	0.00	Y	Arm 5 Ahead	80.00
10/2 (Northern Circulatory)	U	A	2	3	29.1	Geom	-	3.75	0.00	Y	Arm 5 Ahead	55.00
											Arm 11 Right	55.00
11/1 (Eastern Circulatory)	U	C	2	3	14.9	Geom	-	4.25	0.00	Y	Arm 6 Ahead	70.00
11/2 (Eastern Circulatory)	U	C	2	3	13.3	Geom	-	4.25	0.00	Y	Arm 8 Right	65.00
12/1	U		2	3	60.0	Inf	-	-	-	-	-	-
13/1	U		2	3	60.0	Inf	-	-	-	-	-	-
14/1 (M1 northbound slip Ped crossing)	U		2	3	11.3	Geom	-	3.25	0.00	Y	Arm 12 Ahead	Inf
14/2 (M1 northbound slip Ped crossing)	O		2	3	11.1	Geom	-	3.25	0.00	Y	Arm 12 Ahead	Inf

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 Am'	07:45	08:45	01:00	
2: '2022 Pm'	17:00	18:00	01:00	
3: '2028 Without Development Flows (AM)'	07:45	08:45	01:00	
4: '2028 Without Development Flows (PM)'	17:00	18:00	01:00	
5: '2028 With Development Flows (AM)'	07:45	08:45	01:00	
6: '2028 With Development Flows (PM)'	17:00	18:00	01:00	
7: '2038 Without Development Flows (AM)'	07:45	08:45	01:00	
8: '2038 Without Development Flows (PM)'	17:00	18:00	01:00	
9: '2038 With Development Flows (AM)'	07:45	08:45	01:00	
10: '2038 With Development Flows (PM)'	17:00	18:00	01:00	
11: '2a 2028 With Development Flows (AM)'	07:45	08:45	01:00	
12: '2a 2028 With Development Flows (PM)'	17:00	18:00	01:00	
13: '2a 2038 With Development Flows (AM)'	07:45	08:45	01:00	
14: '2a 2038 With Development Flows (PM)'	17:00	18:00	01:00	

Scenario 1: 'AM Base' (FG1: '2022 Am', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	795	0	377	1172
	B	494	0	161	378	1033
	C	0	423	0	44	467
	D	290	735	132	0	1157
	Tot.	784	1953	293	799	3829

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: AM Base
Junction: Unnamed Junction	
1/1 (short)	161
1/2 (with short)	539(In) 378(Out)
1/3	494
2/1 (short)	44
2/2 (with short)	237(In) 193(Out)
2/3	230
3/1	290
3/2 (with short)	867(In) 504(Out)
3/3 (short)	363
4/1	343
4/2 (with short)	829(In) 452(Out)
4/3 (short)	377
5/1	1040
5/2	913
6/1	293
6/2	0
7/1	422
7/2	377
8/1	378
8/2	871
9/1 (short)	423
9/2 (with short)	687(In) 264(Out)
9/3	230
10/1	697
10/2	593
11/1	132
11/2	377
12/1	784
13/1	293
14/1	713
14/2	71

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	43.3 %	1941	1941
				Arm 9 Right	45.00	56.7 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	73.1 %	1926	1926
				Arm 14 Ahead	45.00	26.9 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	77.7 %	1937	1937
				Arm 11 Right	55.00	22.3 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 2: 'PM Base' (FG2: '2022 Pm', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	408	0	187	595
	B	491	0	351	520	1362
	C	0	203	0	168	371
	D	218	389	118	0	725
	Tot.	709	1000	469	875	3053

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: PM Base
Junction: Unnamed Junction	
1/1 (short)	351
1/2 (with short)	871(In) 520(Out)
1/3	491
2/1 (short)	168
2/2 (with short)	232(In) 64(Out)
2/3	139
3/1	218
3/2 (with short)	507(In) 226(Out)
3/3 (short)	281
4/1	167
4/2 (with short)	428(In) 241(Out)
4/3 (short)	187
5/1	457
5/2	543
6/1	469
6/2	0
7/1	688
7/2	187
8/1	520
8/2	678
9/1 (short)	410
9/2 (with short)	555(In) 145(Out)
9/3	139
10/1	290
10/2	420
11/1	118
11/2	187
12/1	709
13/1	469
14/1	628
14/2	81

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	27.6 %	1935	1935
				Arm 9 Right	45.00	72.4 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	44.1 %	1926	1926
				Arm 14 Ahead	45.00	55.9 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	71.9 %	1937	1937
				Arm 11 Right	55.00	28.1 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 3: '2028 Without Development Flows (AM)' (FG3: '2028 Without Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	841	0	496	1337
	B	557	0	193	526	1276
	C	0	472	0	46	518
	D	365	902	173	0	1440
	Tot.	922	2215	366	1068	4571

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2028 Without Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	193
1/2 (with short)	719(In) 526(Out)
1/3	557
2/1 (short)	46
2/2 (with short)	279(In) 233(Out)
2/3	239
3/1	365
3/2 (with short)	1075(In) 537(Out)
3/3 (short)	538
4/1	384
4/2 (with short)	953(In) 457(Out)
4/3 (short)	496
5/1	1154
5/2	1061
6/1	366
6/2	0
7/1	572
7/2	496
8/1	526
8/2	1053
9/1 (short)	502
9/2 (with short)	790(In) 288(Out)
9/3	239
10/1	770
10/2	777
11/1	173
11/2	496
12/1	922
13/1	366
14/1	867
14/2	55

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	47.1 %	1942	1942
				Arm 9 Right	45.00	52.9 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	80.9 %	1926	1926
				Arm 14 Ahead	45.00	19.1 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	77.7 %	1937	1937
				Arm 11 Right	55.00	22.3 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 4: '2028 Without Development Flows (PM)' (FG4: '2028 Without Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	558	0	320	878
	B	532	0	381	749	1662
	C	0	229	0	212	441
	D	351	707	192	0	1250
	Tot.	883	1494	573	1281	4231

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2028 Without Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	381
1/2 (with short)	1066(In) 685(Out)
1/3	596
2/1 (short)	212
2/2 (with short)	244(In) 32(Out)
2/3	197
3/1	351
3/2 (with short)	899(In) 452(Out)
3/3 (short)	447
4/1	238
4/2 (with short)	640(In) 320(Out)
4/3 (short)	320
5/1	722
5/2	772
6/1	573
6/2	0
7/1	897
7/2	384
8/1	685
8/2	916
9/1 (short)	455
9/2 (with short)	564(In) 109(Out)
9/3	197
10/1	484
10/2	644
11/1	192
11/2	320
12/1	883
13/1	573
14/1	806
14/2	77

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	41.9 %	1940	1940
				Arm 9 Right	45.00	58.1 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	29.4 %	1926	1926
				Arm 14 Ahead	45.00	70.6 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	70.2 %	1937	1937
				Arm 11 Right	55.00	29.8 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 5: '2028 With Development Flows (AM)' (FG5: '2028 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	858	0	498	1356
	B	598	0	196	542	1336
	C	0	457	0	48	505
	D	383	938	173	0	1494
	Tot.	981	2253	369	1088	4691

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2028 With Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	196
1/2 (with short)	738(In) 542(Out)
1/3	598
2/1 (short)	48
2/2 (with short)	271(In) 223(Out)
2/3	234
3/1	383
3/2 (with short)	1111(In) 558(Out)
3/3 (short)	553
4/1	392
4/2 (with short)	964(In) 466(Out)
4/3 (short)	498
5/1	1173
5/2	1080
6/1	369
6/2	0
7/1	590
7/2	498
8/1	542
8/2	1096
9/1 (short)	547
9/2 (with short)	821(In) 274(Out)
9/3	234
10/1	781
10/2	787
11/1	173
11/2	498
12/1	981
13/1	369
14/1	930
14/2	51

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	45.4 %	1941	1941
				Arm 9 Right	45.00	54.6 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	81.4 %	1926	1926
				Arm 14 Ahead	45.00	18.6 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	78.0 %	1937	1937
				Arm 11 Right	55.00	22.0 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 6: '2028 With Development Flows (PM)' (FG6: '2028 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	583	0	341	924
	B	488	0	352	705	1545
	C	0	206	0	209	415
	D	352	651	193	0	1196
	Tot.	840	1440	545	1255	4080

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2028 With Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	352
1/2 (with short)	996(In) 644(Out)
1/3	549
2/1 (short)	209
2/2 (with short)	218(In) 9(Out)
2/3	197
3/1	352
3/2 (with short)	844(In) 430(Out)
3/3 (short)	414
4/1	244
4/2 (with short)	680(In) 339(Out)
4/3 (short)	341
5/1	683
5/2	757
6/1	545
6/2	0
7/1	853
7/2	402
8/1	644
8/2	890
9/1 (short)	406
9/2 (with short)	497(In) 91(Out)
9/3	197
10/1	439
10/2	611
11/1	193
11/2	341
12/1	840
13/1	545
14/1	758
14/2	82

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	45.2 %	1941	1941
				Arm 9 Right	45.00	54.8 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	9.9 %	1926	1926
				Arm 14 Ahead	45.00	90.1 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	68.4 %	1937	1937
				Arm 11 Right	55.00	31.6 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 7: '2038 Without Development Flows (AM)' (FG7: '2038 Without Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	905	0	742	1647
	B	616	0	271	791	1678
	C	0	590	0	58	648
	D	472	1170	285	0	1927
	Tot.	1088	2665	556	1591	5900

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 2038 Without Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	271
1/2 (with short)	989(In) 718(Out)
1/3	689
2/1 (short)	58
2/2 (with short)	353(In) 295(Out)
2/3	295
3/1	472
3/2 (with short)	1455(In) 732(Out)
3/3 (short)	723
4/1	727
4/2 (with short)	920(In) 178(Out)
4/3 (short)	742
5/1	1754
5/2	911
6/1	556
6/2	0
7/1	776
7/2	815
8/1	718
8/2	1431
9/1 (short)	600
9/2 (with short)	911(In) 311(Out)
9/3	295
10/1	1027
10/2	1018
11/1	285
11/2	742
12/1	1088
13/1	556
14/1	1072
14/2	16

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	57.0 %	1945	1945
				Arm 9 Right	45.00	43.0 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	94.9 %	1926	1926
				Arm 14 Ahead	45.00	5.1 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	72.0 %	1937	1937
				Arm 11 Right	55.00	28.0 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 8: '2038 Without Development Flows (PM)' (FG8: '2038 Without Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	621	0	305	926
	B	640	0	501	924	2065
	C	0	365	0	291	656
	D	456	1023	273	0	1752
	Tot.	1096	2009	774	1520	5399

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2038 Without Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	501
1/2 (with short)	1307(In) 806(Out)
1/3	758
2/1 (short)	291
2/2 (with short)	370(In) 79(Out)
2/3	286
3/1	456
3/2 (with short)	1296(In) 687(Out)
3/3 (short)	609
4/1	269
4/2 (with short)	657(In) 352(Out)
4/3 (short)	305
5/1	1035
5/2	974
6/1	774
6/2	0
7/1	1097
7/2	423
8/1	806
8/2	1063
9/1 (short)	589
9/2 (with short)	719(In) 130(Out)
9/3	286
10/1	766
10/2	895
11/1	273
11/2	305
12/1	1096
13/1	774
14/1	1045
14/2	51

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	39.8 %	1939	1939
				Arm 9 Right	45.00	60.2 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	60.8 %	1926	1926
				Arm 14 Ahead	45.00	39.2 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	69.5 %	1937	1937
				Arm 11 Right	55.00	30.5 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 9: '2038 With Development Flows (AM)' (FG9: '2038 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	917	0	728	1645
	B	648	0	273	801	1722
	C	0	575	0	58	633
	D	485	1199	283	0	1967
	Tot.	1133	2691	556	1587	5967

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 2038 With Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	273
1/2 (with short)	1006(In) 733(Out)
1/3	716
2/1 (short)	58
2/2 (with short)	346(In) 288(Out)
2/3	287
3/1	485
3/2 (with short)	1482(In) 745(Out)
3/3 (short)	737
4/1	714
4/2 (with short)	931(In) 203(Out)
4/3 (short)	728
5/1	1747
5/2	944
6/1	556
6/2	0
7/1	791
7/2	796
8/1	733
8/2	1444
9/1 (short)	574
9/2 (with short)	936(In) 362(Out)
9/3	287
10/1	1033
10/2	1024
11/1	283
11/2	728
12/1	1133
13/1	556
14/1	1059
14/2	74

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	55.1 %	1945	1945
				Arm 9 Right	45.00	44.9 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	79.6 %	1926	1926
				Arm 14 Ahead	45.00	20.4 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	72.4 %	1937	1937
				Arm 11 Right	55.00	27.6 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 10: '2038 With Development Flows (PM)' (FG10: '2038 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	653	0	339	992
	B	651	0	486	943	2080
	C	0	356	0	296	652
	D	470	1013	269	0	1752
	Tot.	1121	2022	755	1578	5476

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 10: 2038 With Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	486
1/2 (with short)	1308(In) 822(Out)
1/3	772
2/1 (short)	296
2/2 (with short)	358(In) 62(Out)
2/3	294
3/1	470
3/2 (with short)	1282(In) 680(Out)
3/3 (short)	602
4/1	298
4/2 (with short)	694(In) 355(Out)
4/3 (short)	339
5/1	1040
5/2	982
6/1	755
6/2	0
7/1	1118
7/2	460
8/1	822
8/2	1111
9/1 (short)	602
9/2 (with short)	713(In) 111(Out)
9/3	294
10/1	742
10/2	896
11/1	269
11/2	339
12/1	1121
13/1	755
14/1	1072
14/2	49

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	41.4 %	1940	1940
				Arm 9 Right	45.00	58.6 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	55.9 %	1926	1926
				Arm 14 Ahead	45.00	44.1 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	70.0 %	1937	1937
				Arm 11 Right	55.00	30.0 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 11: '2a 2028 With Development Flows (AM)' (FG11: '2a 2028 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	840	0	469	1309
	B	592	0	200	543	1335
	C	0	458	0	46	504
	D	371	953	177	0	1501
	Tot.	963	2251	377	1058	4649

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 11: 2a 2028 With Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	200
1/2 (with short)	743(In) 543(Out)
1/3	592
2/1 (short)	46
2/2 (with short)	270(In) 224(Out)
2/3	234
3/1	371
3/2 (with short)	1130(In) 567(Out)
3/3 (short)	563
4/1	375
4/2 (with short)	934(In) 465(Out)
4/3 (short)	469
5/1	1166
5/2	1085
6/1	377
6/2	0
7/1	589
7/2	469
8/1	543
8/2	1061
9/1 (short)	541
9/2 (with short)	816(In) 275(Out)
9/3	234
10/1	791
10/2	797
11/1	177
11/2	469
12/1	963
13/1	377
14/1	912
14/2	51

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	44.2 %	1941	1941
				Arm 9 Right	45.00	55.8 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	81.5 %	1926	1926
				Arm 14 Ahead	45.00	18.5 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	77.8 %	1937	1937
				Arm 11 Right	55.00	22.2 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 12: '2a 2028 With Development Flows (PM)' (FG12: '2a 2028 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	540	0	291	831
	B	494	0	362	690	1546
	C	0	219	0	199	418
	D	329	650	186	0	1165
	Tot.	823	1409	548	1180	3960

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 12: 2a 2028 With Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	362
1/2 (with short)	997(In) 635(Out)
1/3	549
2/1 (short)	199
2/2 (with short)	240(In) 41(Out)
2/3	178
3/1	329
3/2 (with short)	836(In) 418(Out)
3/3 (short)	418
4/1	213
4/2 (with short)	618(In) 327(Out)
4/3 (short)	291
5/1	672
5/2	737
6/1	548
6/2	0
7/1	834
7/2	346
8/1	635
8/2	840
9/1 (short)	413
9/2 (with short)	535(In) 122(Out)
9/3	178
10/1	459
10/2	596
11/1	186
11/2	291
12/1	823
13/1	548
14/1	742
14/2	81

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	41.2 %	1940	1940
				Arm 9 Right	45.00	58.8 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	33.6 %	1926	1926
				Arm 14 Ahead	45.00	66.4 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	68.8 %	1937	1937
				Arm 11 Right	55.00	31.2 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 13: '2a 2038 With Development Flows (AM)' (FG13: '2a 2038 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	914	0	737	1651
	B	617	0	267	796	1680
	C	0	561	0	58	619
	D	480	1219	289	0	1988
	Tot.	1097	2694	556	1591	5938

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 13: 2a 2038 With Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	267
1/2 (with short)	987(In) 720(Out)
1/3	693
2/1 (short)	58
2/2 (with short)	338(In) 280(Out)
2/3	281
3/1	480
3/2 (with short)	1508(In) 758(Out)
3/3 (short)	750
4/1	722
4/2 (with short)	929(In) 192(Out)
4/3 (short)	737
5/1	1760
5/2	934
6/1	556
6/2	0
7/1	778
7/2	813
8/1	720
8/2	1430
9/1 (short)	554
9/2 (with short)	897(In) 343(Out)
9/3	281
10/1	1038
10/2	1031
11/1	289
11/2	737
12/1	1097
13/1	556
14/1	1034
14/2	63

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	56.9 %	1945	1945
				Arm 9 Right	45.00	43.1 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	81.6 %	1926	1926
				Arm 14 Ahead	45.00	18.4 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	72.0 %	1937	1937
				Arm 11 Right	55.00	28.0 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 14: '2a 2038 With Development Flows (PM)' (FG14: '2a 2038 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	624	0	301	925
	B	654	0	487	934	2075
	C	0	369	0	287	656
	D	450	1027	256	0	1733
	Tot.	1104	2020	743	1522	5389

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 14: 2a 2038 With Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	487
1/2 (with short)	1302(In) 815(Out)
1/3	773
2/1 (short)	287
2/2 (with short)	372(In) 85(Out)
2/3	284
3/1	450
3/2 (with short)	1283(In) 674(Out)
3/3 (short)	609
4/1	269
4/2 (with short)	656(In) 355(Out)
4/3 (short)	301
5/1	1028
5/2	992
6/1	743
6/2	0
7/1	1102
7/2	420
8/1	815
8/2	1074
9/1 (short)	606
9/2 (with short)	739(In) 133(Out)
9/3	284
10/1	759
10/2	893
11/1	256
11/2	301
12/1	1104
13/1	743
14/1	1056
14/2	48

Lane Saturation Flows

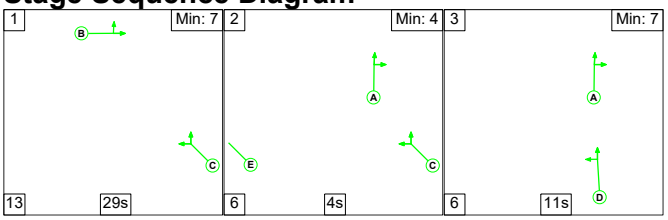
Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	39.1 %	1939	1939
				Arm 9 Right	45.00	60.9 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	63.9 %	1926	1926
				Arm 14 Ahead	45.00	36.1 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

Full Input Data And Results

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	71.3 %	1937	1937
				Arm 11 Right	55.00	28.7 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 1: 'AM Base' (FG1: '2022 Am', Plan 1: 'Network Control Plan 1')
Controller :C1 - Westside 25911

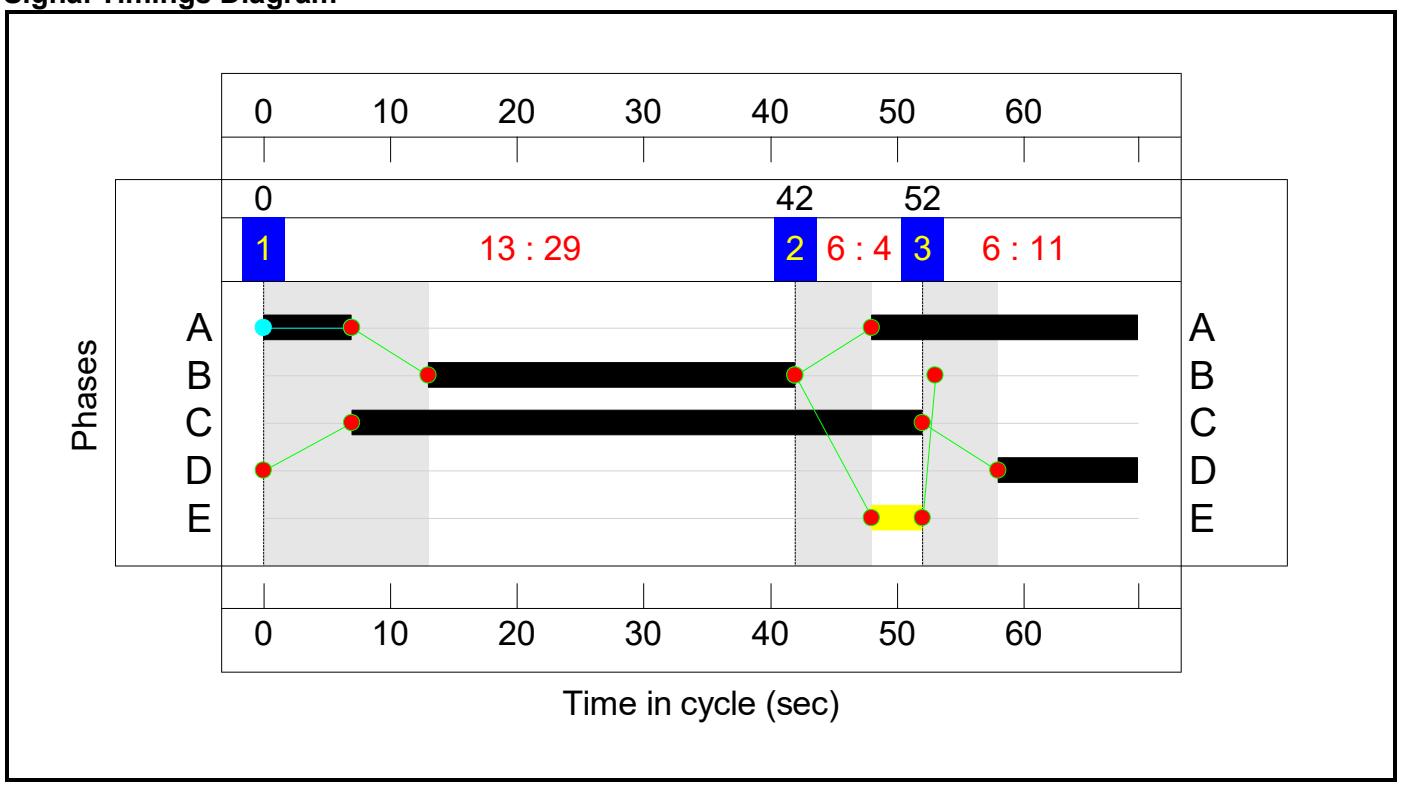
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	29	4	11
Change Point	0	42	52

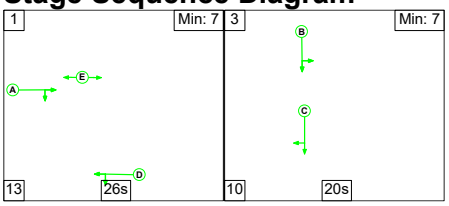
Signal Timings Diagram



Full Input Data And Results

Controller :C2 - Eastside 25921

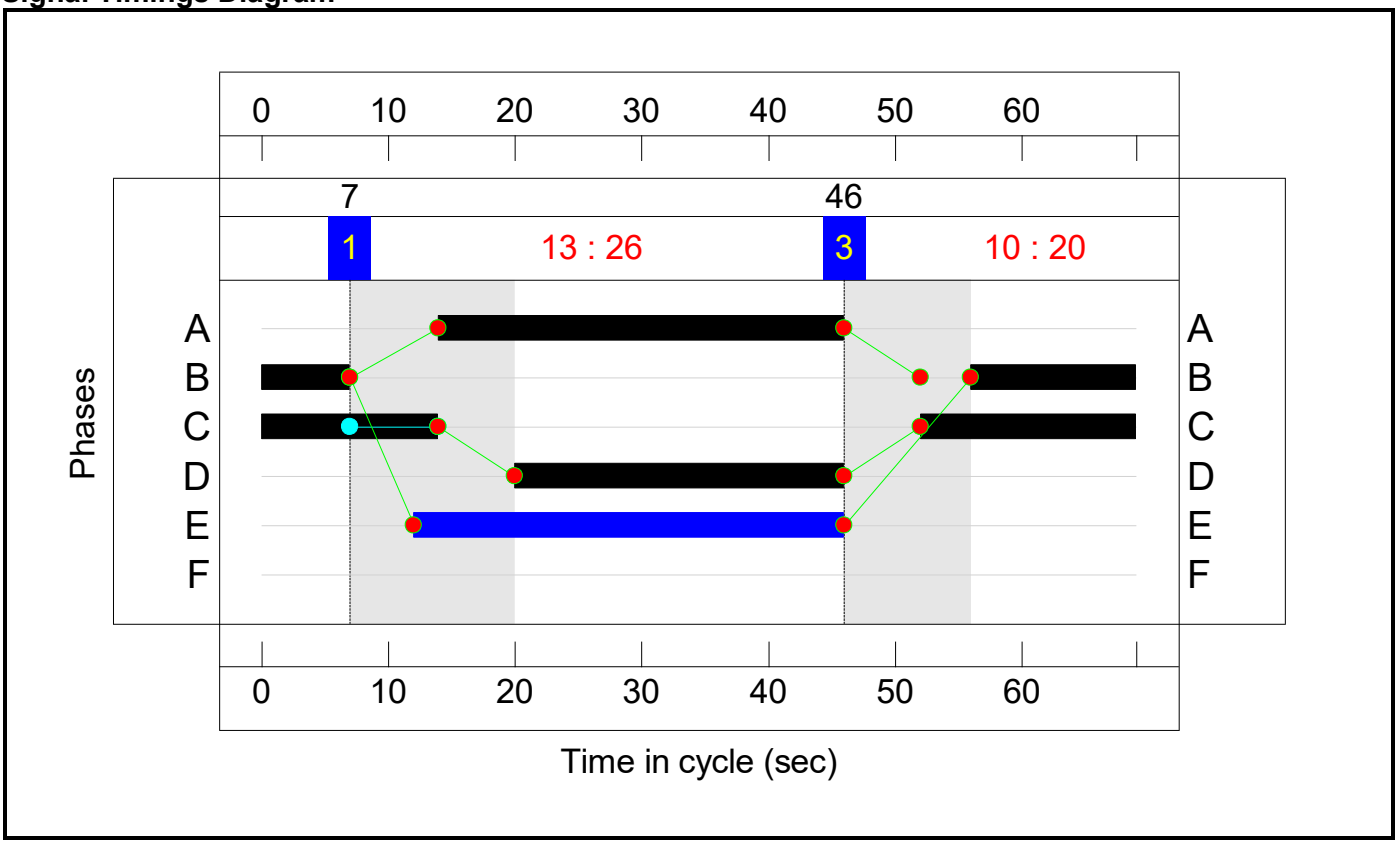
Stage Sequence Diagram



Stage Timings

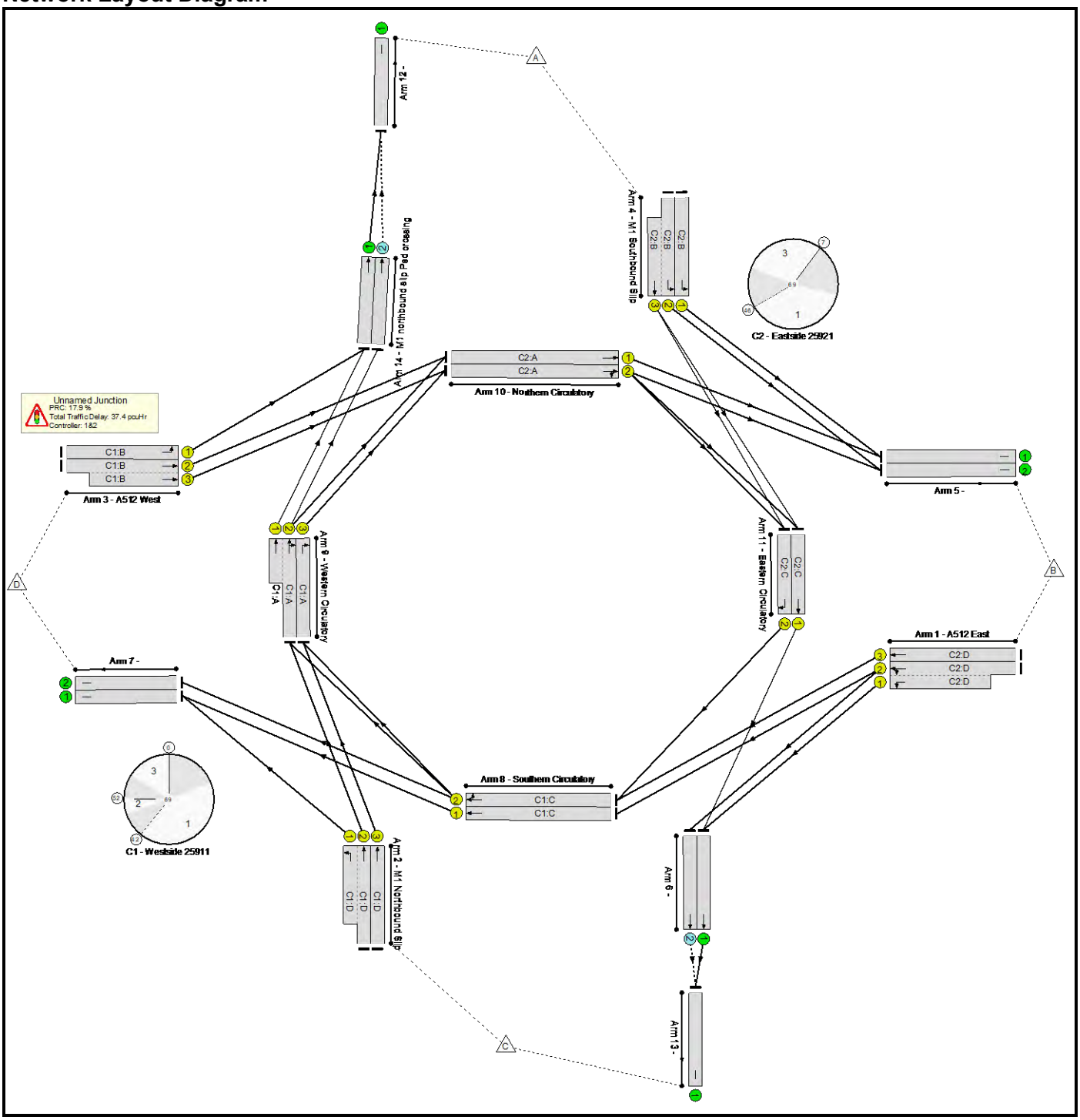
Stage	1	3
Duration	26	20
Change Point	7	46

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**76.4%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**76.4%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	26	-	539	1949:1963	763+325	49.6 : 49.6%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	26	-	494	1955	765	64.6%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	11	-	237	1973:1963	343+78	56.2 : 56.2%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	11	-	230	1979	344	66.8%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	29	-	290	1926	837	34.6%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	29	-	867	1937:1941	718+517	70.2 : 70.2%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	20	-	343	1937	590	58.2%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	20	-	829	1945:1948	592+545	76.4 : 69.2%
5/1		U	N/A	N/A	-		-	-	-	1040	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	913	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	293	1980	1980	14.8%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	976	0.0%
7/1		U	N/A	N/A	-		-	-	-	422	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	377	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	45	-	378	1961	1307	28.9%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	45	-	871	1941	1294	67.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	28	-	687	1926:1941	388+621	68.1 : 68.1%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	28	-	230	1932	812	28.3%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	32	-	697	1953	934	74.6%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	32	-	593	1937	926	64.0%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	31	-	132	1997	926	14.3%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	31	-	377	1994	925	40.8%
12/1		U	N/A	N/A	-		-	-	-	784	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	293	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	713	1940	1940	36.8%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	71	1940	558	12.7%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**71**	**0**	**0**	**25.2**	**12.2**	**0.0**	**37.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**71**	**0**	**0**	**25.2**	**12.2**	**0.0**	**37.4**	**-**	**-**	**-**	**-**
1/2+1/1	539	539	-	-	-	2.3	0.5	-	2.8	18.6	5.5	0.5	6.0
1/3	494	494	-	-	-	2.3	0.9	-	3.3	23.7	7.7	0.9	8.6
2/2+2/1	237	237	-	-	-	1.7	0.6	-	2.3	35.4	3.4	0.6	4.0
2/3	230	230	-	-	-	1.7	1.0	-	2.7	42.1	4.1	1.0	5.1
3/1	290	290	-	-	-	1.0	0.3	-	1.3	16.3	3.6	0.3	3.9
3/2+3/3	867	867	-	-	-	3.5	1.2	-	4.6	19.2	7.3	1.2	8.5
4/1	343	343	-	-	-	1.9	0.7	-	2.6	27.6	5.5	0.7	6.2
4/2+4/3	829	829	-	-	-	4.9	1.3	-	6.2	27.1	7.8	1.3	9.1
5/1	1040	1040	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	913	913	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	293	293	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	422	422	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	377	377	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	378	378	-	-	-	0.4	0.2	-	0.6	6.0	1.7	0.2	1.9
8/2	871	871	-	-	-	0.7	1.0	-	1.7	7.2	3.9	1.0	4.9
9/2+9/1	687	687	-	-	-	1.7	1.1	-	2.7	14.3	8.7	1.1	9.7
9/3	230	230	-	-	-	0.1	0.2	-	0.3	4.9	0.2	0.2	0.4
10/1	697	697	-	-	-	1.4	1.5	-	2.8	14.7	5.7	1.5	7.1
10/2	593	593	-	-	-	1.0	0.9	-	1.8	11.2	5.2	0.9	6.0
11/1	132	132	-	-	-	0.5	0.1	-	0.6	15.9	2.4	0.1	2.5
11/2	377	377	-	-	-	0.1	0.3	-	0.4	4.1	0.2	0.3	0.5
12/1	784	784	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	293	293	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

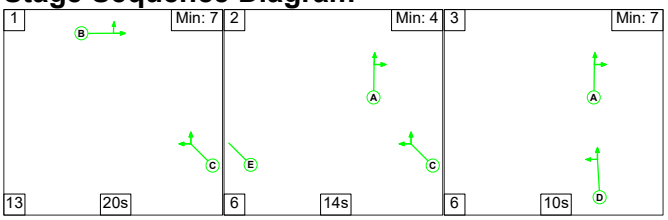
Full Input Data And Results

14/1	713	713	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
14/2	71	71	71	0	0	0.0	0.1	-	0.1	3.7	0.0	0.1	0.1

C1 - Westside 25911	PRC for Signalled Lanes (%):	28.2	Total Delay for Signalled Lanes (pcuHr):	16.38	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	17.9	Total Delay for Signalled Lanes (pcuHr):	20.59	Cycle Time (s):	69
	PRC Over All Lanes (%):	17.9	Total Delay Over All Lanes(pcuHr):	37.42		

Full Input Data And Results
Scenario 2: 'PM Base' (FG2: '2022 Pm', Plan 1: 'Network Control Plan 1')
Controller :C1 - Westside 25911

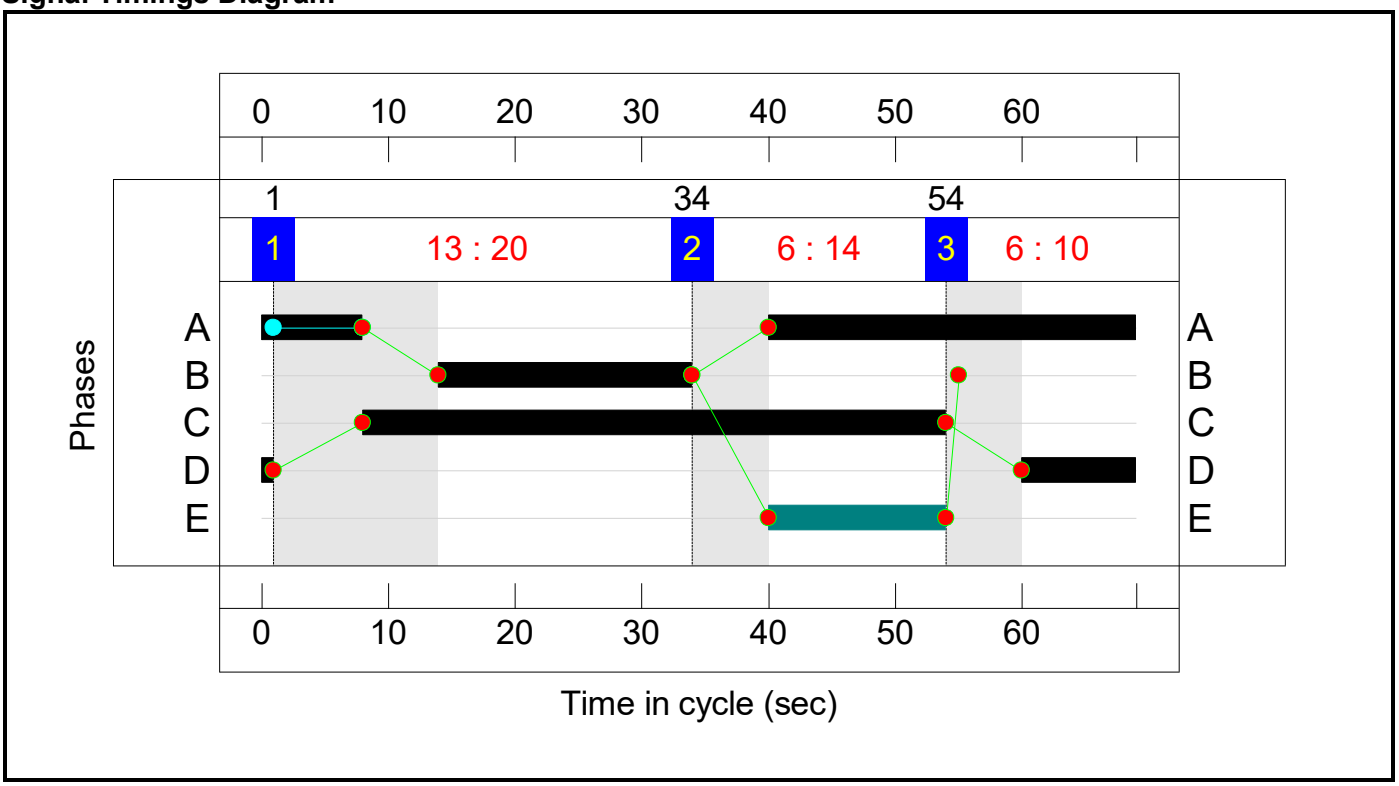
Stage Sequence Diagram



Stage Timings

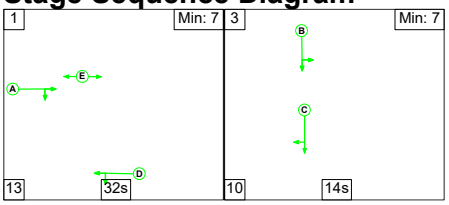
Stage	1	2	3
Duration	20	14	10
Change Point	1	34	54

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

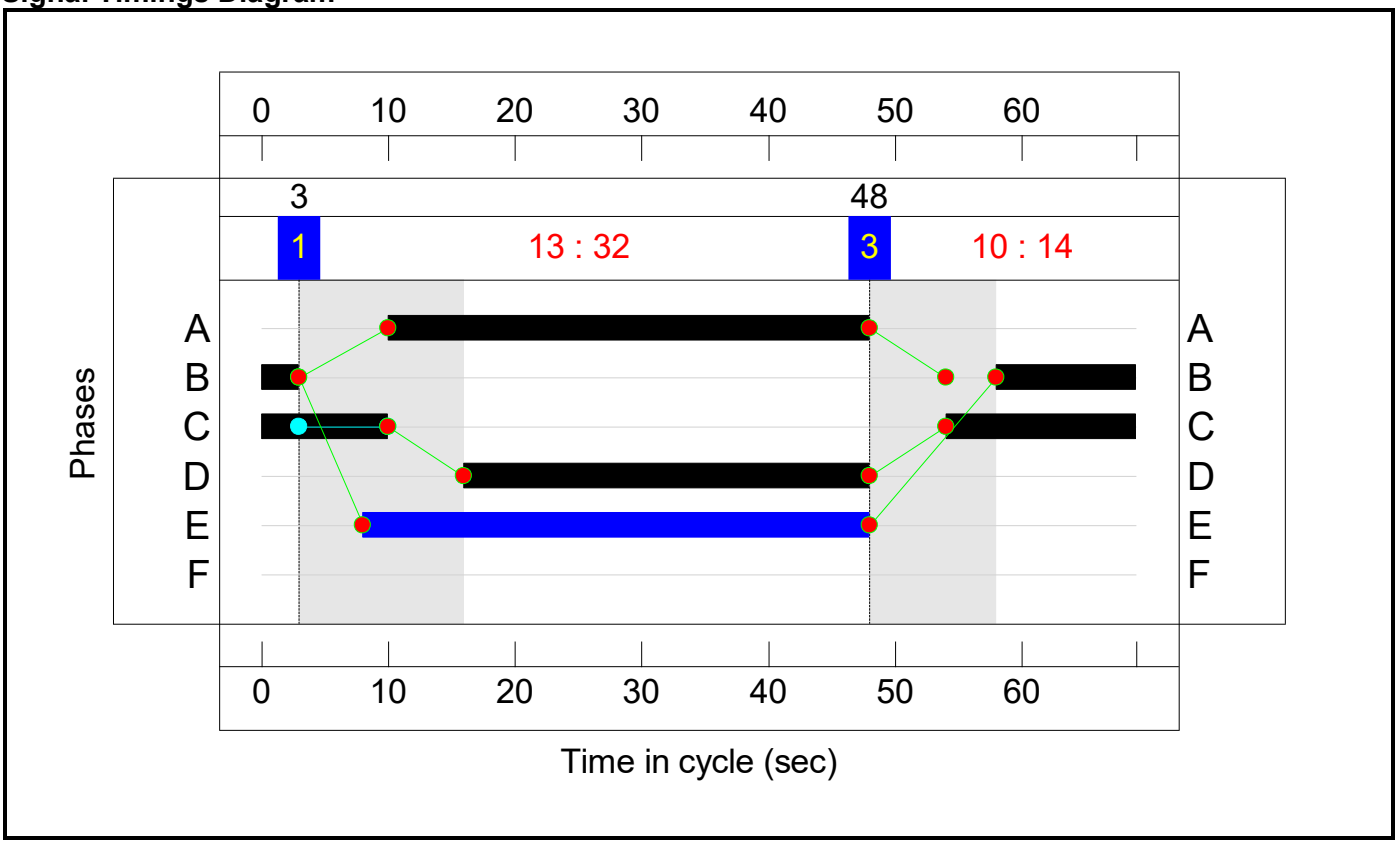


Stage Timings

Stage	1	3
Duration	32	14
Change Point	3	48

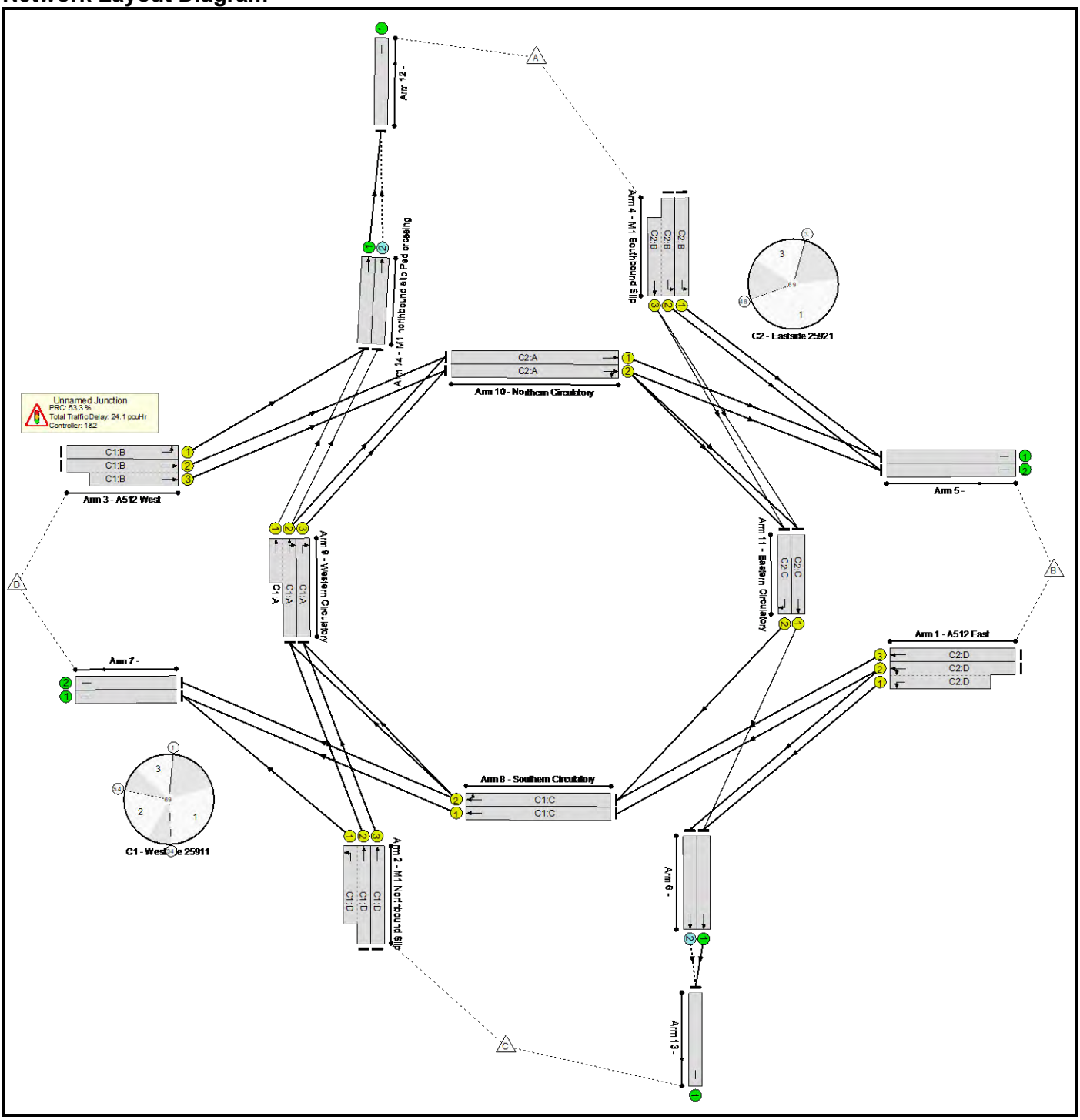
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.7%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	32	-	871	1949:1963	886+598	58.7 : 58.7%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	32	-	491	1955	935	52.5%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	232	1973:1963	119+313	53.7 : 53.7%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	139	1979	315	44.1%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	20	-	218	1926	586	37.2%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	20	-	507	1937:1941	458+570	49.3 : 49.3%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	14	-	167	1937	421	39.7%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	14	-	428	1945:1948	423+423	57.0 : 44.2%
5/1		U	N/A	N/A	-		-	-	-	457	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	543	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	469	1980	1980	23.7%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	612	0.0%
7/1		U	N/A	N/A	-		-	-	-	688	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	187	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	520	1961	1336	38.9%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	678	1935	1318	51.4%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	37	-	555	1926:1941	311+881	46.6 : 46.6%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	37	-	139	1932	1064	13.1%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	38	-	290	1953	1104	26.3%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	38	-	420	1937	1095	38.4%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	25	-	118	1997	752	15.7%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	25	-	187	1994	751	24.9%
12/1		U	N/A	N/A	-		-	-	-	709	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	469	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	628	1940	1940	32.4%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	81	1940	577	14.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**81**	**0**	**0**	**17.7**	**6.4**	**0.0**	**24.1**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**81**	**0**	**0**	**17.7**	**6.4**	**0.0**	**24.1**	**-**	**-**	**-**	**-**
1/2+1/1	871	871	-	-	-	3.0	0.7	-	3.7	15.2	7.1	0.7	7.8
1/3	491	491	-	-	-	1.7	0.6	-	2.3	16.6	6.5	0.6	7.1
2/2+2/1	232	232	-	-	-	1.7	0.6	-	2.3	35.2	2.9	0.6	3.5
2/3	139	139	-	-	-	1.0	0.4	-	1.4	36.4	2.4	0.4	2.8
3/1	218	218	-	-	-	1.1	0.3	-	1.4	23.7	3.3	0.3	3.6
3/2+3/3	507	507	-	-	-	2.7	0.5	-	3.2	22.7	4.4	0.5	4.9
4/1	167	167	-	-	-	1.1	0.3	-	1.4	30.2	2.7	0.3	3.1
4/2+4/3	428	428	-	-	-	2.8	0.5	-	3.3	28.1	4.1	0.5	4.6
5/1	457	457	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	543	543	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	469	469	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	688	688	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	187	187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	520	520	-	-	-	0.5	0.3	-	0.8	5.6	2.0	0.3	2.3
8/2	678	678	-	-	-	0.5	0.5	-	1.0	5.3	2.2	0.5	2.7
9/2+9/1	555	555	-	-	-	0.7	0.4	-	1.1	7.4	3.4	0.4	3.8
9/3	139	139	-	-	-	0.0	0.1	-	0.1	3.0	0.1	0.1	0.2
10/1	290	290	-	-	-	0.2	0.2	-	0.3	4.2	0.4	0.2	0.6
10/2	420	420	-	-	-	0.2	0.3	-	0.5	4.6	0.6	0.3	1.0
11/1	118	118	-	-	-	0.4	0.1	-	0.5	15.0	2.2	0.1	2.3
11/2	187	187	-	-	-	0.1	0.2	-	0.2	4.2	0.1	0.2	0.3
12/1	709	709	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	469	469	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	628	628	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
14/2	81	81	81	0	0	0.0	0.1	-	0.1	3.6	0.0	0.1	0.1

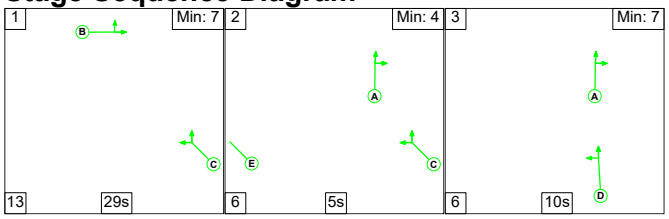
C1 - Westside 25911	PRC for Signalled Lanes (%):	67.6	Total Delay for Signalled Lanes (pcuHr):	11.37	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	53.3	Total Delay for Signalled Lanes (pcuHr):	12.26	Cycle Time (s):	69
	PRC Over All Lanes (%):	53.3	Total Delay Over All Lanes(pcuHr):	24.11		

Full Input Data And Results

Scenario 3: '2028 Without Development Flows (AM)' (FG3: '2028 Without Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

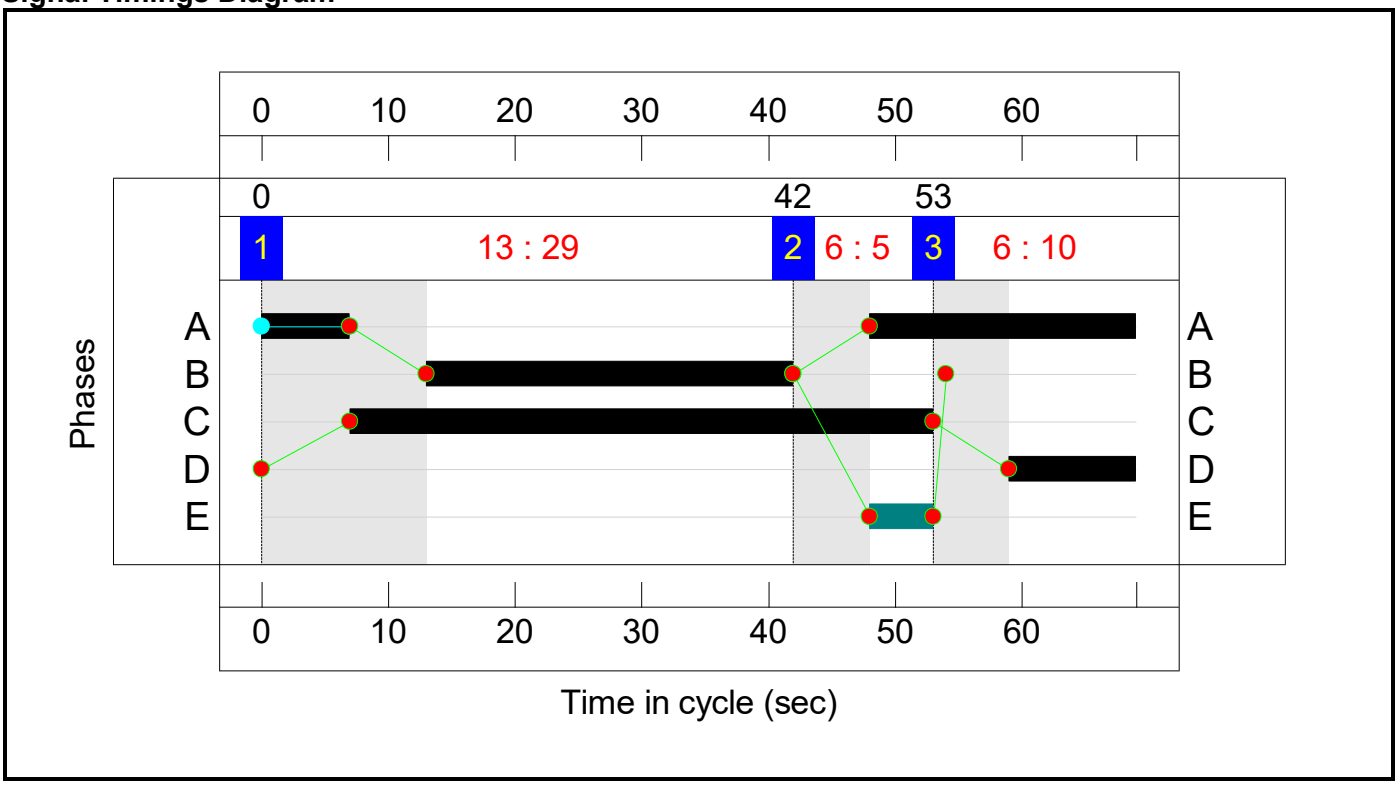
Stage Sequence Diagram



Stage Timings

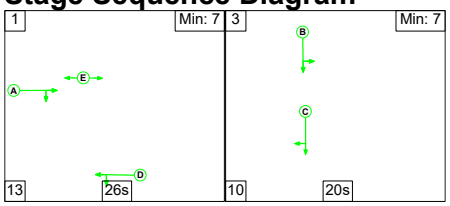
Stage	1	2	3
Duration	29	5	10
Change Point	0	42	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

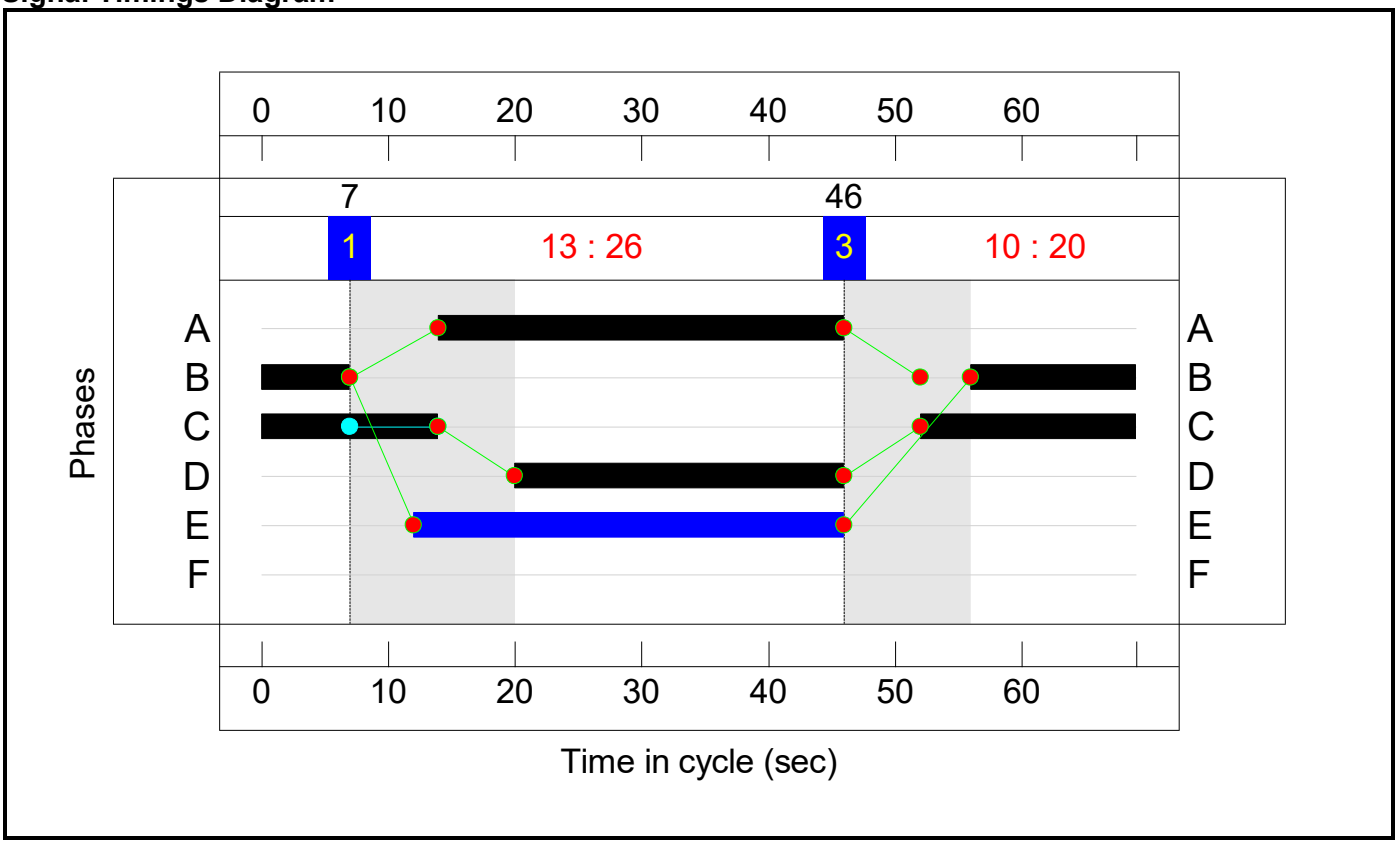


Stage Timings

Stage	1	3
Duration	26	20
Change Point	7	46

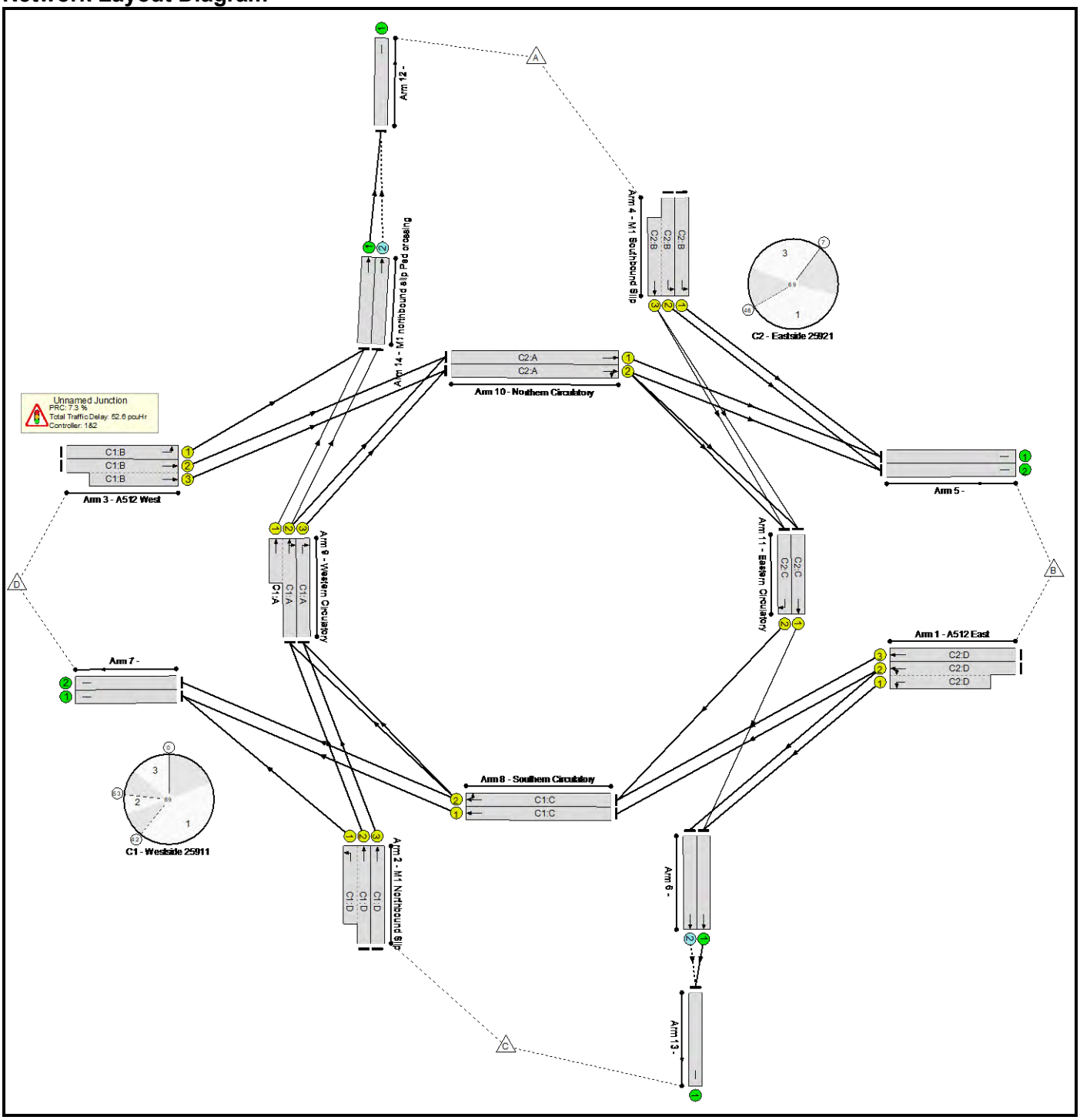
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.9%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.9%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	26	-	719	1949:1963	763+280	69.0 : 69.0%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	26	-	557	1955	765	72.8%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	279	1973:1963	315+62	74.1 : 74.1%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	239	1979	315	75.8%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	29	-	365	1926	837	43.6%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	29	-	1075	1937:1941	691+692	77.7 : 77.7%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	20	-	384	1937	590	65.1%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	20	-	953	1945:1948	592+593	77.2 : 83.7%
5/1		U	N/A	N/A	-		-	-	-	1154	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	1061	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	366	1980	1980	18.5%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	634	0.0%
7/1		U	N/A	N/A	-		-	-	-	572	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	526	1961	1336	39.4%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	1053	1942	1323	79.6%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	28	-	790	1926:1941	363+633	79.4 : 79.4%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	28	-	239	1932	812	29.4%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	32	-	770	1953	934	82.4%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	32	-	777	1937	926	83.9%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	31	-	173	1997	926	18.7%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	31	-	496	1994	925	53.6%
12/1		U	N/A	N/A	-		-	-	-	922	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	366	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	867	1940	1940	44.7%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	55	1940	524	10.5%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**55**	**0**	**0**	**31.8**	**20.8**	**0.0**	**52.6**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**55**	**0**	**0**	**31.8**	**20.8**	**0.0**	**52.6**	**-**	**-**	**-**	**-**
1/2+1/1	719	719	-	-	-	3.3	1.1	-	4.4	22.1	8.3	1.1	9.4
1/3	557	557	-	-	-	2.8	1.3	-	4.1	26.4	9.0	1.3	10.3
2/2+2/1	279	279	-	-	-	2.1	1.4	-	3.5	45.1	4.2	1.4	5.6
2/3	239	239	-	-	-	1.8	1.5	-	3.3	50.4	4.3	1.5	5.8
3/1	365	365	-	-	-	1.4	0.4	-	1.8	17.4	4.9	0.4	5.3
3/2+3/3	1075	1075	-	-	-	4.6	1.7	-	6.3	21.0	7.9	1.7	9.6
4/1	384	384	-	-	-	2.2	0.9	-	3.1	29.5	6.3	0.9	7.2
4/2+4/3	953	953	-	-	-	5.9	2.0	-	7.9	29.8	8.8	2.0	10.8
5/1	1154	1154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1061	1061	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	366	366	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	572	572	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	526	526	-	-	-	0.6	0.3	-	1.0	6.7	2.5	0.3	2.8
8/2	1053	1053	-	-	-	0.8	1.9	-	2.8	9.4	5.4	1.9	7.4
9/2+9/1	790	790	-	-	-	2.0	1.9	-	3.9	17.9	10.1	1.9	12.0
9/3	239	239	-	-	-	0.2	0.2	-	0.4	5.6	0.3	0.2	0.5
10/1	770	770	-	-	-	1.6	2.3	-	3.9	18.1	6.7	2.3	9.0
10/2	777	777	-	-	-	1.7	2.5	-	4.2	19.3	6.8	2.5	9.3
11/1	173	173	-	-	-	0.7	0.1	-	0.8	16.1	3.2	0.1	3.3
11/2	496	496	-	-	-	0.1	0.6	-	0.7	5.3	0.3	0.6	0.9
12/1	922	922	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	366	366	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	867	867	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
14/2	55	55	55	0	0	0.0	0.1	-	0.1	3.8	0.0	0.1	0.1

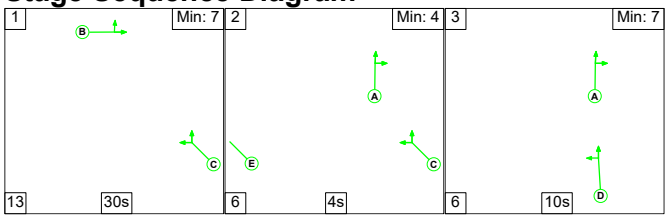
C1 - Westside 25911	PRC for Signalled Lanes (%):	13.1	Total Delay for Signalled Lanes (pcuHr):	22.92	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	7.3	Total Delay for Signalled Lanes (pcuHr):	29.07	Cycle Time (s):	69
	PRC Over All Lanes (%):	7.3	Total Delay Over All Lanes(pcuHr):	52.57		

Full Input Data And Results

Scenario 4: '2028 Without Development Flows (PM)' (FG4: '2028 Without Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

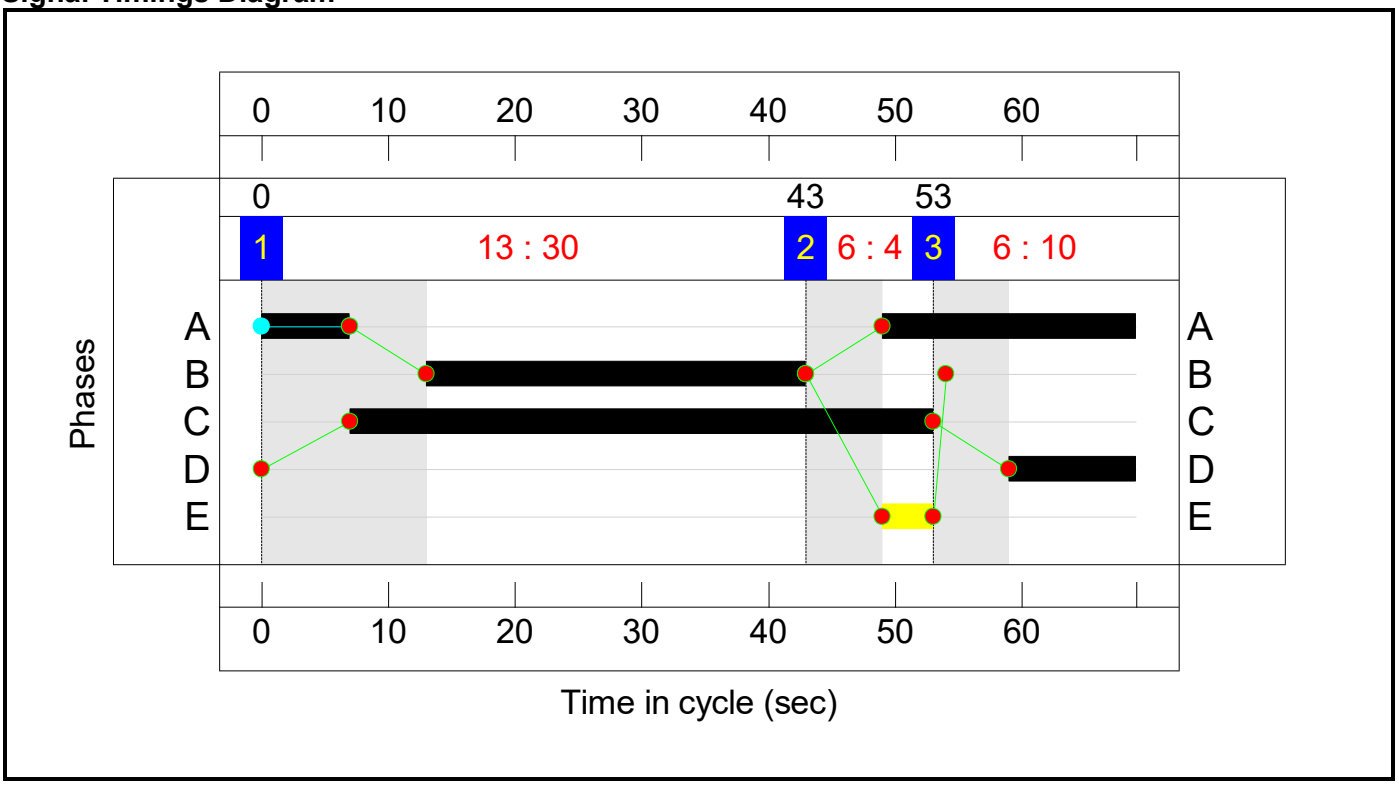
Stage Sequence Diagram



Stage Timings

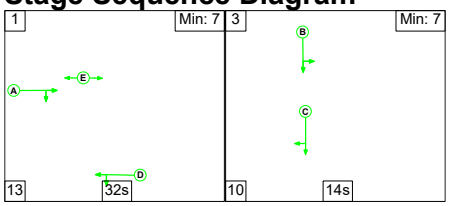
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

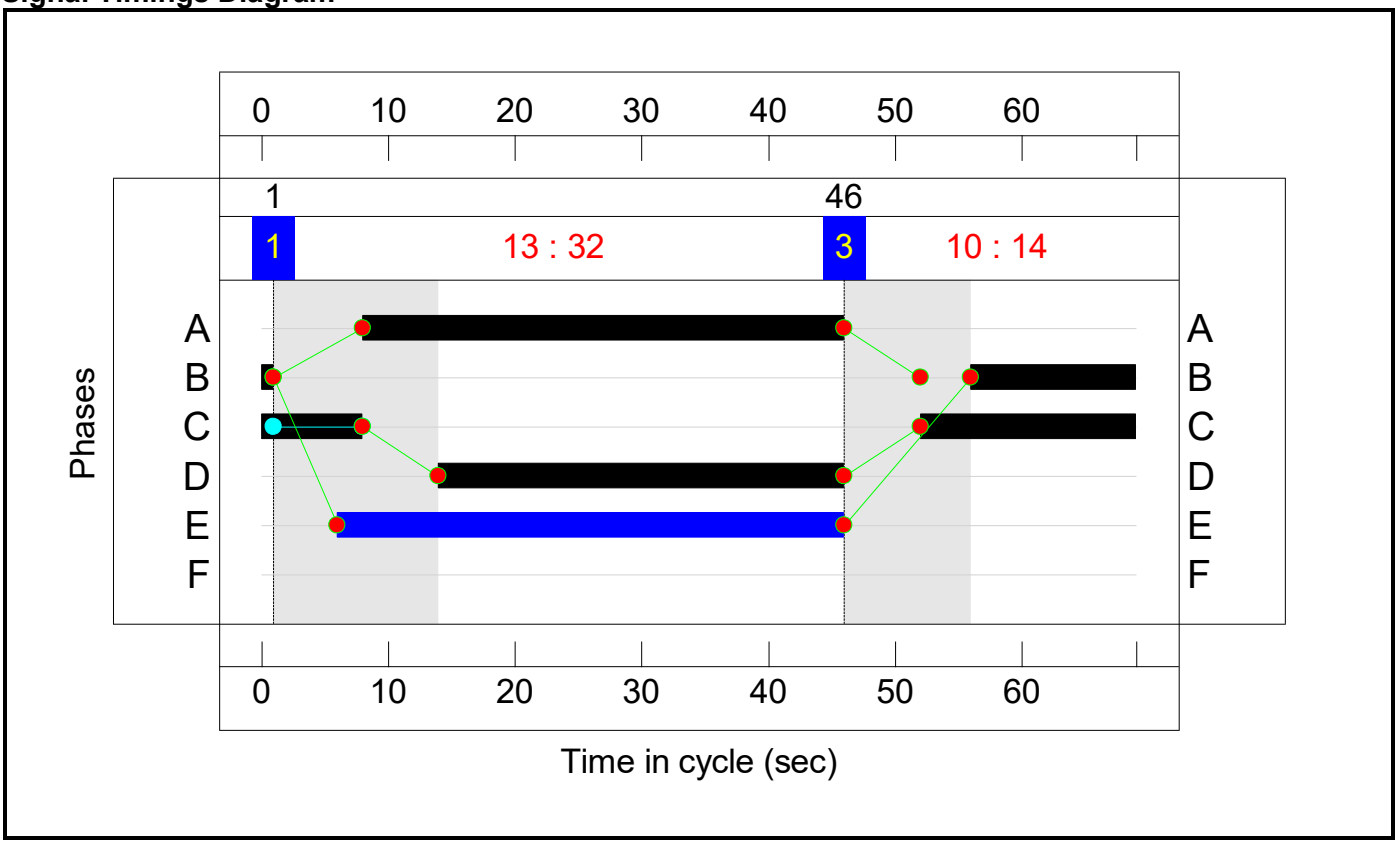


Stage Timings

Stage	1	3
Duration	32	14
Change Point	1	46

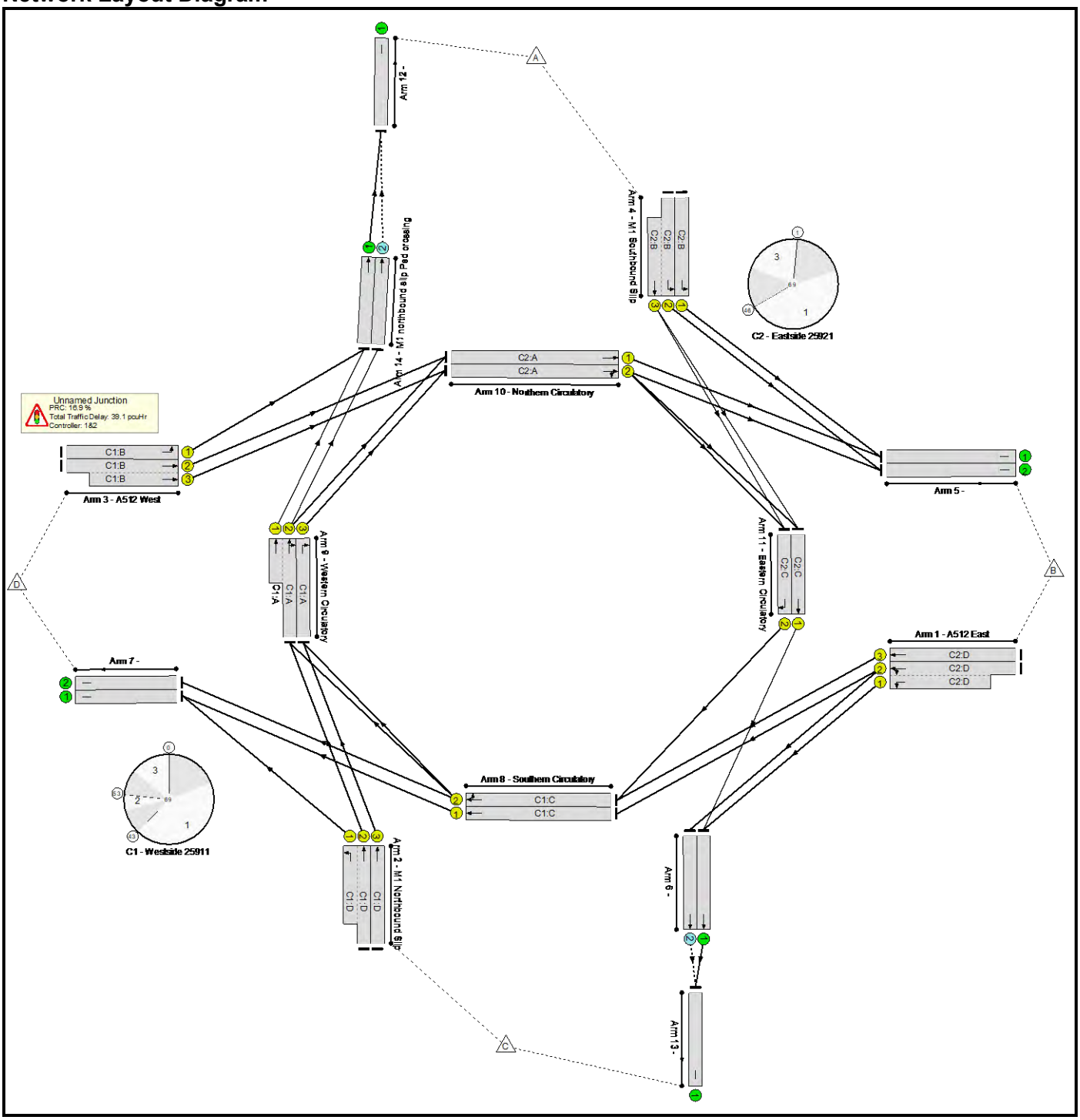
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**77.0%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**77.0%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	32	-	1066	1949:1963	889+495	77.0 : 77.0%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	32	-	596	1955	935	63.7%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	244	1973:1963	47+313	67.7 : 67.7%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	197	1979	315	62.4%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	351	1926	865	40.6%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	899	1937:1941	708+700	63.8 : 63.8%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	14	-	238	1937	421	56.5%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	14	-	640	1945:1948	423+423	75.7 : 75.6%
5/1		U	N/A	N/A	-		-	-	-	722	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	772	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	573	1980	1980	28.9%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	589	0.0%
7/1		U	N/A	N/A	-		-	-	-	897	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	384	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	685	1961	1336	51.3%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	916	1940	1321	69.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	564	1926:1941	170+712	63.9 : 63.9%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	197	1932	784	25.1%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	38	-	484	1953	1104	43.8%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	38	-	644	1937	1095	58.8%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	25	-	192	1997	752	25.5%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	25	-	320	1994	751	42.6%
12/1		U	N/A	N/A	-		-	-	-	883	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	573	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	806	1940	1940	41.5%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	77	1940	538	14.3%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**77**	**0**	**0**	**26.4**	**12.8**	**0.0**	**39.1**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**77**	**0**	**0**	**26.4**	**12.8**	**0.0**	**39.1**	**-**	**-**	**-**	**-**
1/2+1/1	1066	1066	-	-	-	4.0	1.7	-	5.6	19.1	10.5	1.7	12.1
1/3	596	596	-	-	-	2.2	0.9	-	3.1	18.8	8.4	0.9	9.3
2/2+2/1	244	244	-	-	-	1.8	1.0	-	2.9	42.2	3.8	1.0	4.9
2/3	197	197	-	-	-	1.5	0.8	-	2.3	42.1	3.5	0.8	4.3
3/1	351	351	-	-	-	1.2	0.3	-	1.6	16.3	4.5	0.3	4.8
3/2+3/3	899	899	-	-	-	3.4	0.9	-	4.3	17.1	6.2	0.9	7.0
4/1	238	238	-	-	-	1.6	0.6	-	2.2	33.9	4.0	0.6	4.7
4/2+4/3	640	640	-	-	-	4.5	1.5	-	6.0	33.9	5.7	1.5	7.2
5/1	722	722	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	772	772	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	573	573	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	897	897	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	384	384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	685	685	-	-	-	0.7	0.5	-	1.2	6.5	2.7	0.5	3.3
8/2	916	916	-	-	-	0.6	1.1	-	1.7	6.8	3.3	1.1	4.5
9/2+9/1	564	564	-	-	-	2.0	0.9	-	2.9	18.4	9.3	0.9	10.2
9/3	197	197	-	-	-	0.1	0.2	-	0.3	5.0	0.2	0.2	0.4
10/1	484	484	-	-	-	0.8	0.4	-	1.2	9.0	2.4	0.4	2.8
10/2	644	644	-	-	-	0.8	0.7	-	1.6	8.7	2.7	0.7	3.4
11/1	192	192	-	-	-	0.9	0.2	-	1.0	19.4	3.6	0.2	3.8
11/2	320	320	-	-	-	0.1	0.4	-	0.5	5.8	0.2	0.4	0.6
12/1	883	883	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	806	806	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
14/2	77	77	77	0	0	0.0	0.1	-	0.1	3.9	0.4	0.1	0.4

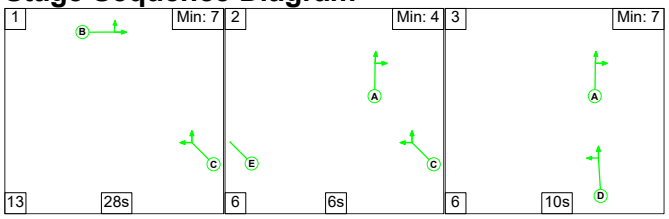
C1 - Westside 25911	PRC for Signalled Lanes (%):	29.8	Total Delay for Signalled Lanes (pcuHr):	17.16	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	16.9	Total Delay for Signalled Lanes (pcuHr):	21.34	Cycle Time (s):	69
	PRC Over All Lanes (%):	16.9	Total Delay Over All Lanes(pcuHr):	39.14		

Full Input Data And Results

Scenario 5: '2028 With Development Flows (AM)' (FG5: '2028 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

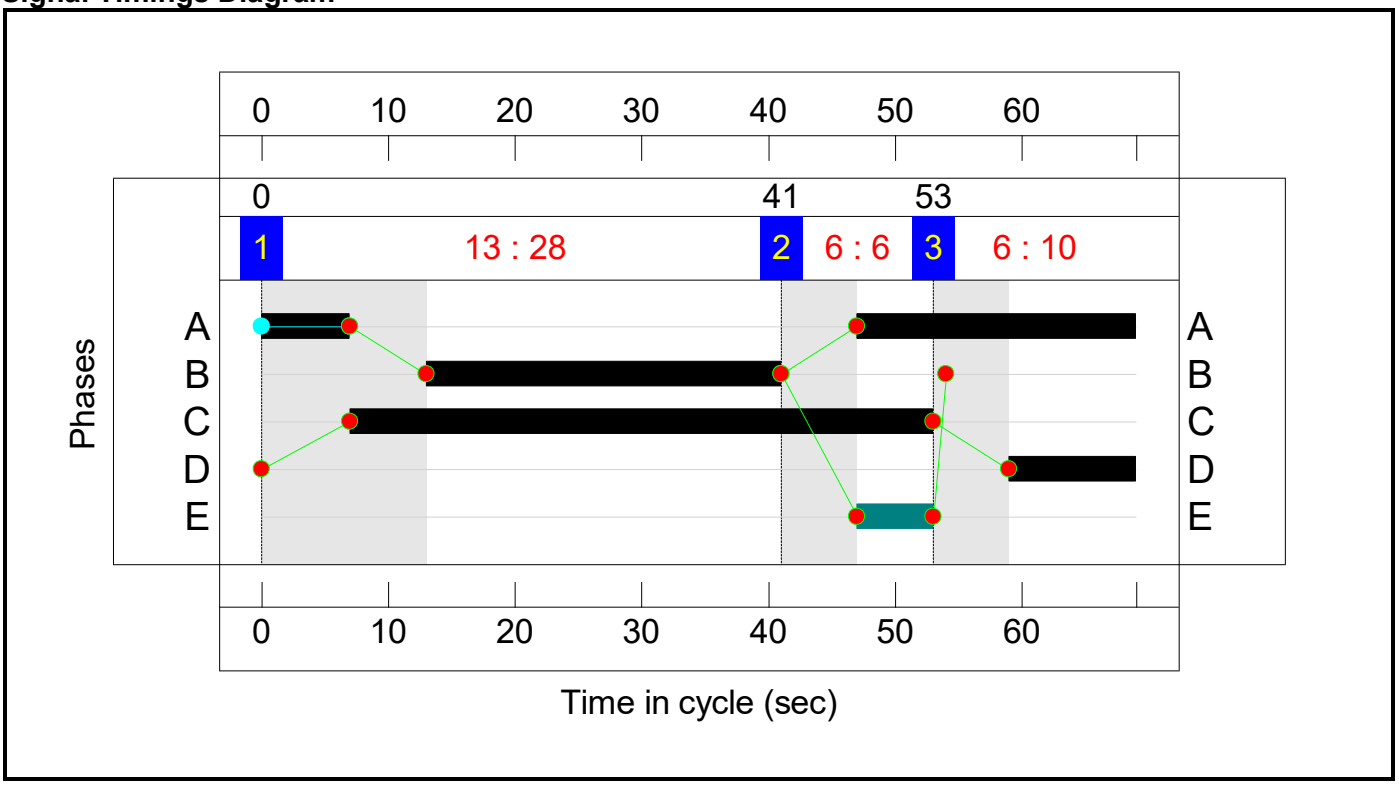
Stage Sequence Diagram



Stage Timings

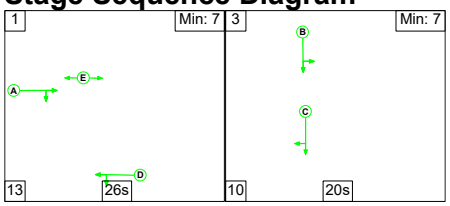
Stage	1	2	3
Duration	28	6	10
Change Point	0	41	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

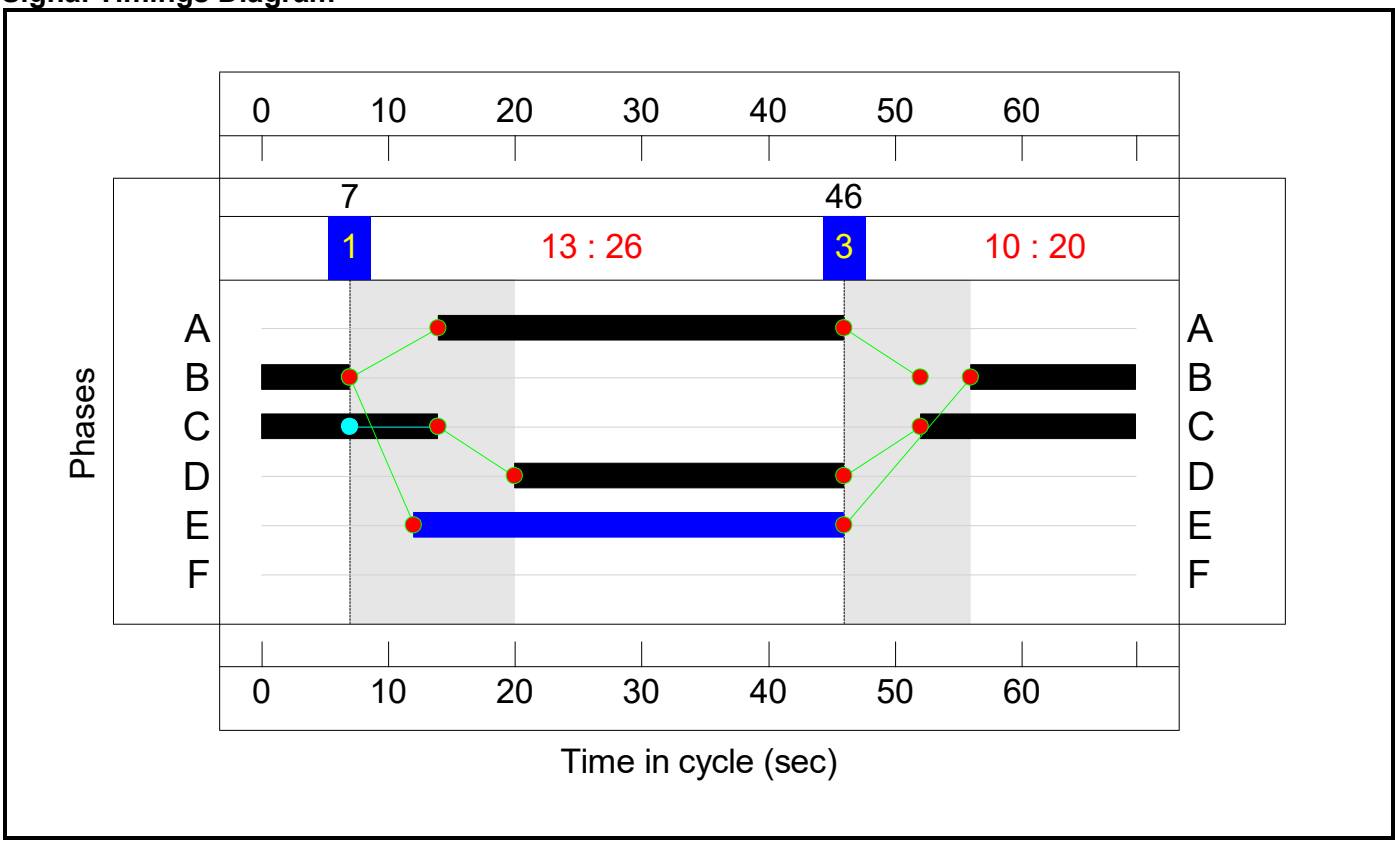


Stage Timings

Stage	1	3
Duration	26	20
Change Point	7	46

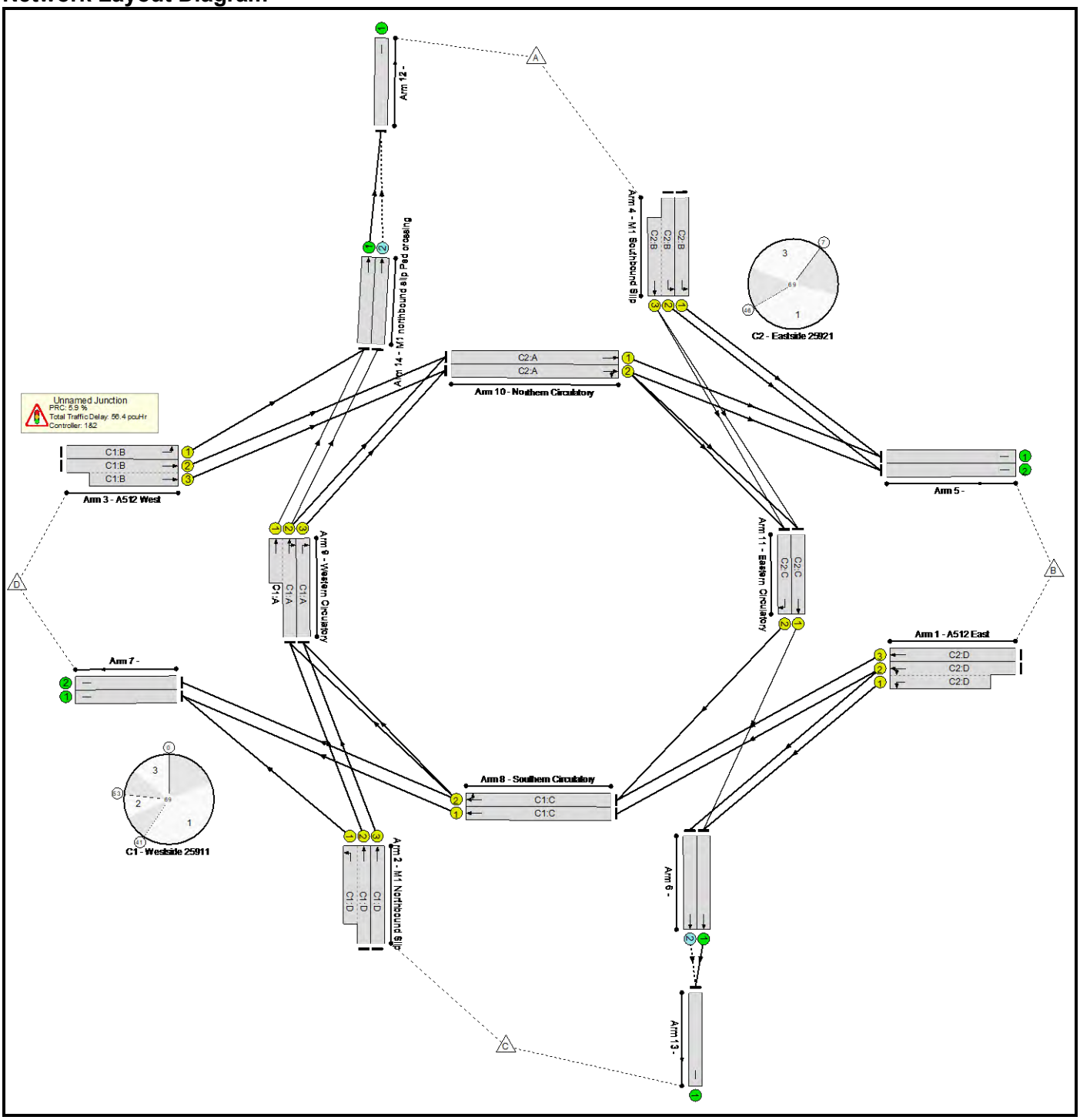
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.0%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.0%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	26	-	738	1949:1963	763+276	71.1 : 71.1%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	26	-	598	1955	765	78.2%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	271	1973:1963	315+68	70.9 : 70.9%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	234	1979	315	74.2%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	28	-	383	1926	809	47.3%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	28	-	1111	1937:1941	680+674	82.1 : 82.1%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	20	-	392	1937	590	66.5%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	20	-	964	1945:1948	592+593	78.7 : 84.0%
5/1		U	N/A	N/A	-		-	-	-	1173	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	1080	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	369	1980	1980	18.6%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	634	0.0%
7/1		U	N/A	N/A	-		-	-	-	590	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	498	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	542	1961	1336	40.6%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	1096	1941	1322	82.9%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	29	-	821	1926:1941	335+670	81.7 : 81.7%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	29	-	234	1932	840	27.9%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	32	-	781	1953	934	83.6%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	32	-	787	1937	926	85.0%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	31	-	173	1997	926	18.7%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	31	-	498	1994	925	53.9%
12/1		U	N/A	N/A	-		-	-	-	981	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	369	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	930	1940	1940	47.9%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	51	1940	510	10.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**51**	**0**	**0**	**33.4**	**23.0**	**0.0**	**56.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**51**	**0**	**0**	**33.4**	**23.0**	**0.0**	**56.4**	**-**	**-**	**-**	**-**
1/2+1/1	738	738	-	-	-	3.4	1.2	-	4.7	22.7	8.7	1.2	10.0
1/3	598	598	-	-	-	3.1	1.8	-	4.8	29.0	10.0	1.8	11.7
2/2+2/1	271	271	-	-	-	2.0	1.2	-	3.2	42.9	4.0	1.2	5.2
2/3	234	234	-	-	-	1.8	1.4	-	3.2	49.0	4.2	1.4	5.6
3/1	383	383	-	-	-	1.5	0.4	-	2.0	18.7	5.2	0.4	5.7
3/2+3/3	1111	1111	-	-	-	5.0	2.3	-	7.3	23.5	8.7	2.3	10.9
4/1	392	392	-	-	-	2.3	1.0	-	3.3	30.0	6.5	1.0	7.5
4/2+4/3	964	964	-	-	-	5.9	2.1	-	8.1	30.2	8.9	2.1	11.0
5/1	1173	1173	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1080	1080	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	369	369	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	590	590	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	498	498	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	542	542	-	-	-	0.7	0.3	-	1.0	6.9	2.6	0.3	3.0
8/2	1096	1096	-	-	-	1.1	2.4	-	3.4	11.3	9.2	2.4	11.6
9/2+9/1	821	821	-	-	-	2.2	2.2	-	4.4	19.4	11.0	2.2	13.2
9/3	234	234	-	-	-	0.2	0.2	-	0.3	5.3	0.3	0.2	0.5
10/1	781	781	-	-	-	1.7	2.5	-	4.1	19.0	6.6	2.5	9.1
10/2	787	787	-	-	-	1.7	2.7	-	4.4	20.2	6.8	2.7	9.5
11/1	173	173	-	-	-	0.6	0.1	-	0.8	15.9	3.2	0.1	3.3
11/2	498	498	-	-	-	0.2	0.6	-	0.7	5.3	0.3	0.6	0.9
12/1	981	981	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	369	369	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	930	930	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
14/2	51	51	51	0	0	0.0	0.1	-	0.1	3.9	0.0	0.1	0.1

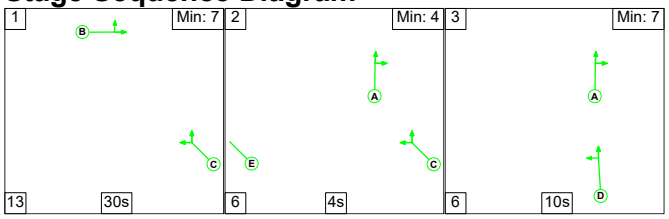
C1 - Westside 25911	PRC for Signalled Lanes (%):	8.6	Total Delay for Signalled Lanes (pcuHr):	24.90	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	5.9	Total Delay for Signalled Lanes (pcuHr):	30.85	Cycle Time (s):	69
	PRC Over All Lanes (%):	5.9	Total Delay Over All Lanes(pcuHr):	56.38		

Full Input Data And Results

Scenario 6: '2028 With Development Flows (PM)' (FG6: '2028 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

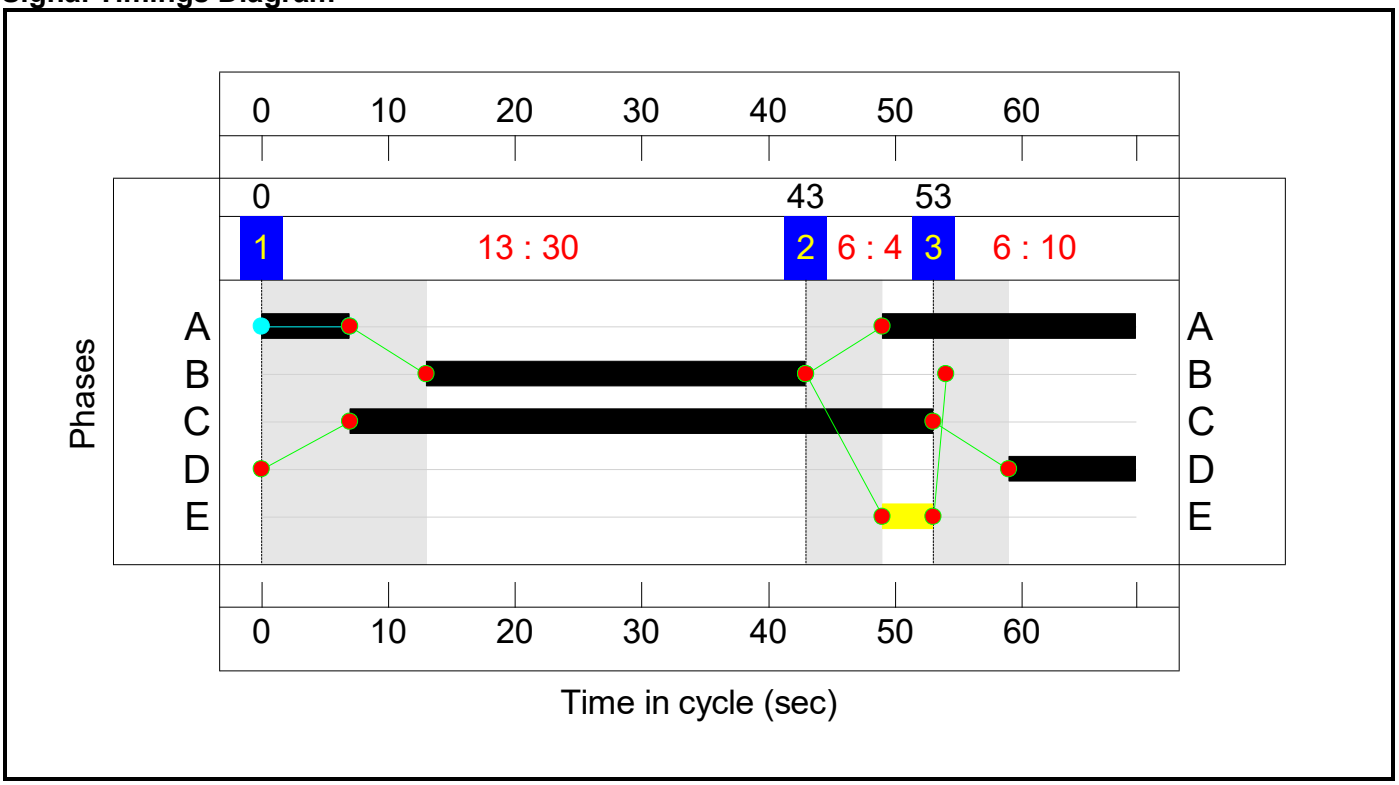
Stage Sequence Diagram



Stage Timings

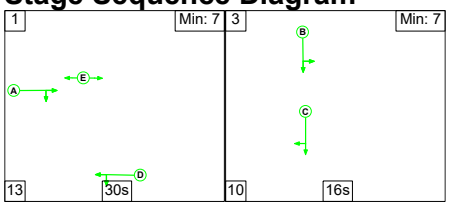
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

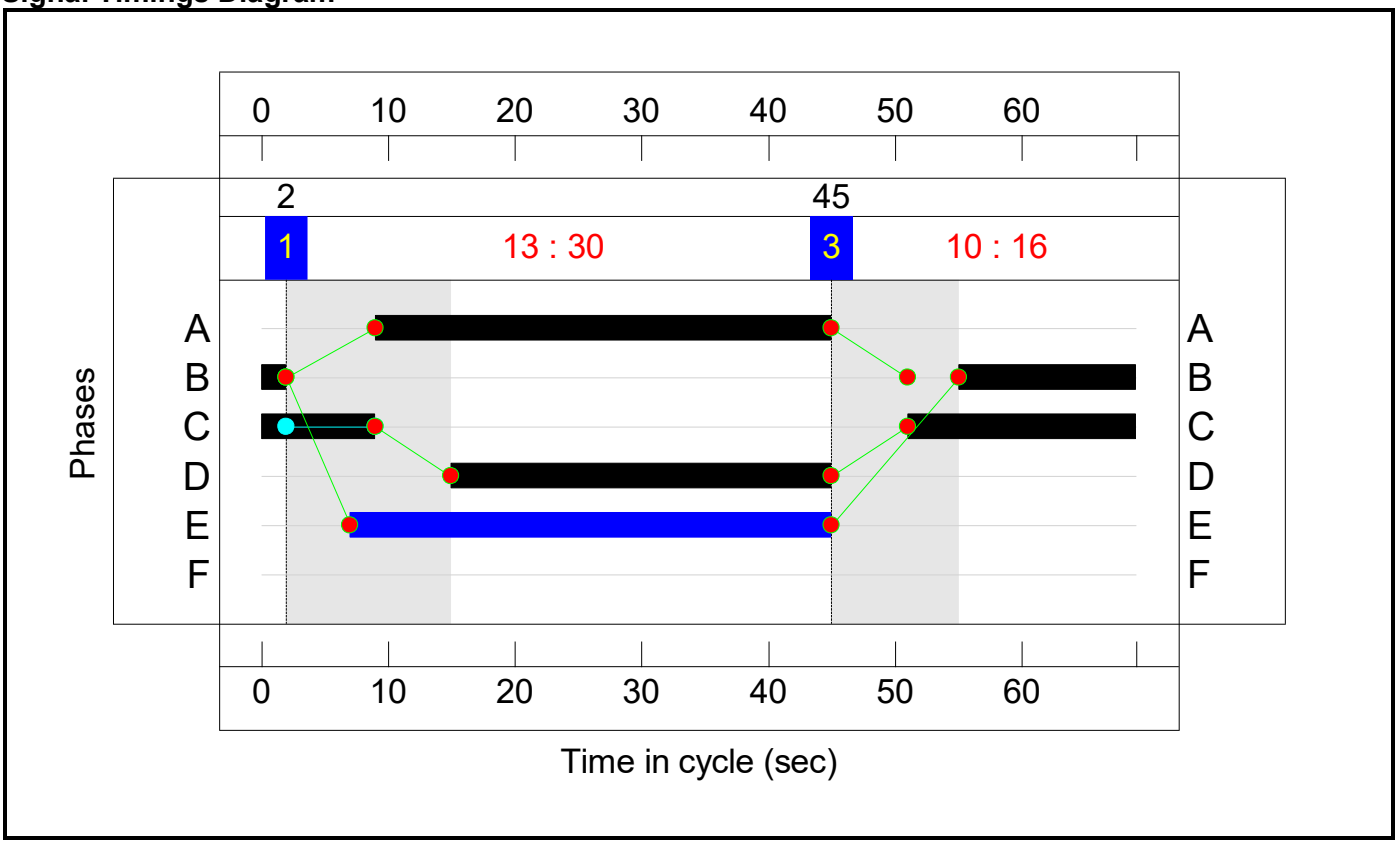


Stage Timings

Stage	1	3
Duration	30	16
Change Point	2	45

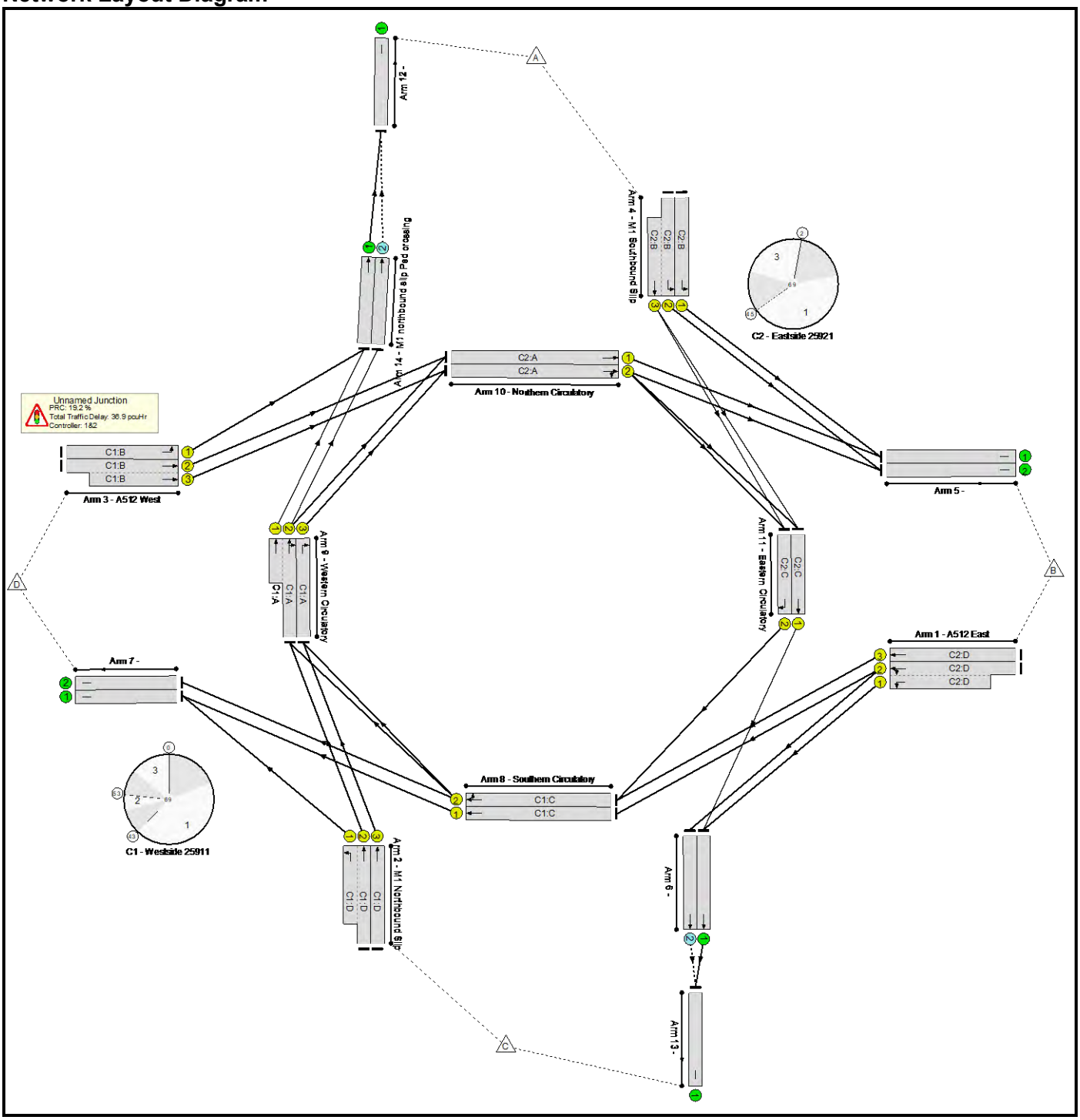
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.5%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	30	-	996	1949:1963	853+466	75.5 : 75.5%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	30	-	549	1955	878	62.5%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	218	1973:1963	13+313	66.8 : 66.8%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	197	1979	315	62.4%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	352	1926	865	40.7%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	844	1937:1941	711+684	60.5 : 60.5%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	16	-	244	1937	477	51.1%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	16	-	680	1945:1948	479+480	70.7 : 71.1%
5/1		U	N/A	N/A	-		-	-	-	683	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	757	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	545	1980	1980	27.5%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	595	0.0%
7/1		U	N/A	N/A	-		-	-	-	853	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	402	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	644	1961	1336	48.2%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	890	1941	1322	67.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	497	1926:1941	161+717	56.6 : 56.6%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	197	1932	784	25.1%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	36	-	439	1953	1047	41.9%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	36	-	611	1937	1039	58.8%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	27	-	193	1997	810	23.8%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	27	-	341	1994	809	42.1%
12/1		U	N/A	N/A	-		-	-	-	840	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	545	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	758	1940	1940	39.1%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	82	1940	548	15.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**82**	**0**	**0**	**25.4**	**11.5**	**0.0**	**36.9**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**82**	**0**	**0**	**25.4**	**11.5**	**0.0**	**36.9**	**-**	**-**	**-**	**-**
1/2+1/1	996	996	-	-	-	4.0	1.5	-	5.6	20.1	10.0	1.5	11.5
1/3	549	549	-	-	-	2.2	0.8	-	3.0	20.0	7.9	0.8	8.8
2/2+2/1	218	218	-	-	-	1.6	1.0	-	2.6	43.5	3.7	1.0	4.7
2/3	197	197	-	-	-	1.5	0.8	-	2.3	42.1	3.5	0.8	4.3
3/1	352	352	-	-	-	1.3	0.3	-	1.6	16.3	4.5	0.3	4.8
3/2+3/3	844	844	-	-	-	3.1	0.8	-	3.9	16.6	5.7	0.8	6.5
4/1	244	244	-	-	-	1.5	0.5	-	2.0	30.1	4.0	0.5	4.5
4/2+4/3	680	680	-	-	-	4.5	1.2	-	5.7	30.1	6.0	1.2	7.2
5/1	683	683	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	757	757	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	545	545	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	853	853	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	402	402	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	644	644	-	-	-	0.6	0.5	-	1.1	6.2	2.5	0.5	2.9
8/2	890	890	-	-	-	0.5	1.0	-	1.6	6.3	3.3	1.0	4.3
9/2+9/1	497	497	-	-	-	1.6	0.6	-	2.3	16.4	8.3	0.6	8.9
9/3	197	197	-	-	-	0.1	0.2	-	0.3	5.0	0.2	0.2	0.4
10/1	439	439	-	-	-	0.9	0.4	-	1.2	10.2	2.4	0.4	2.8
10/2	611	611	-	-	-	0.9	0.7	-	1.6	9.5	2.9	0.7	3.6
11/1	193	193	-	-	-	0.8	0.2	-	1.0	18.7	3.6	0.2	3.8
11/2	341	341	-	-	-	0.1	0.4	-	0.5	5.0	0.2	0.4	0.6
12/1	840	840	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	545	545	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	758	758	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
14/2	82	82	82	0	0	0.0	0.1	-	0.1	4.0	0.6	0.1	0.7

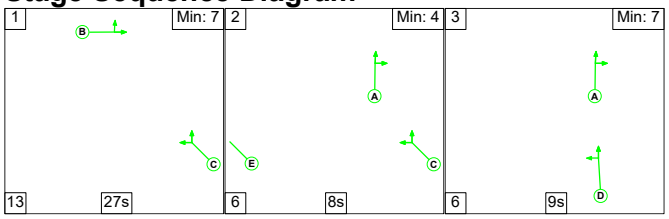
C1 - Westside 25911	PRC for Signalled Lanes (%):	33.7	Total Delay for Signalled Lanes (pcuHr):	15.64	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	19.2	Total Delay for Signalled Lanes (pcuHr):	20.68	Cycle Time (s):	69
	PRC Over All Lanes (%):	19.2	Total Delay Over All Lanes(pcuHr):	36.92		

Full Input Data And Results

Scenario 7: '2038 Without Development Flows (AM)' (FG7: '2038 Without Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

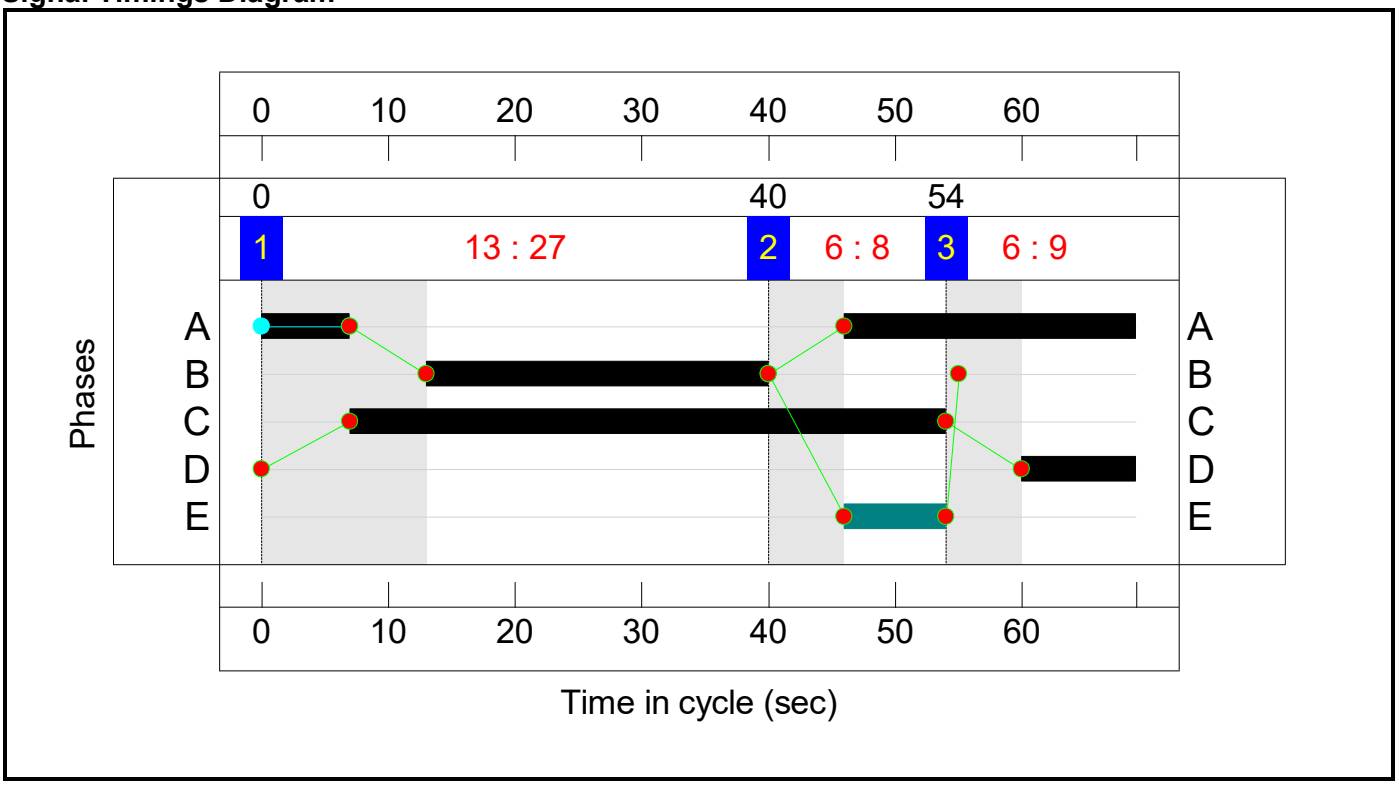
Stage Sequence Diagram



Stage Timings

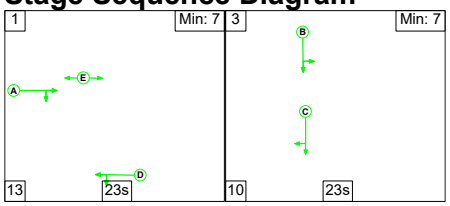
Stage	1	2	3
Duration	27	8	9
Change Point	0	40	54

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

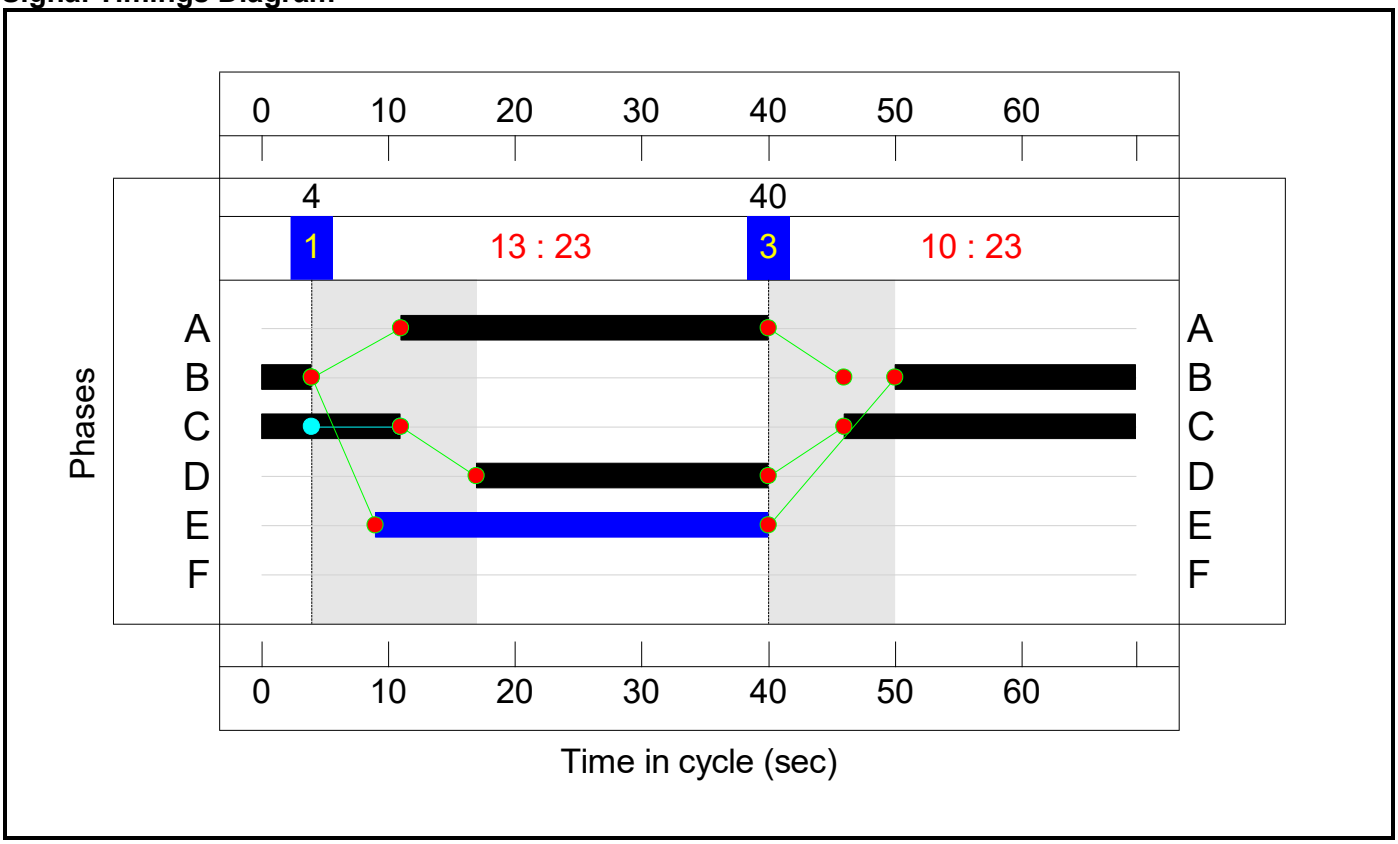


Stage Timings

Stage	1	3
Duration	23	23
Change Point	4	40

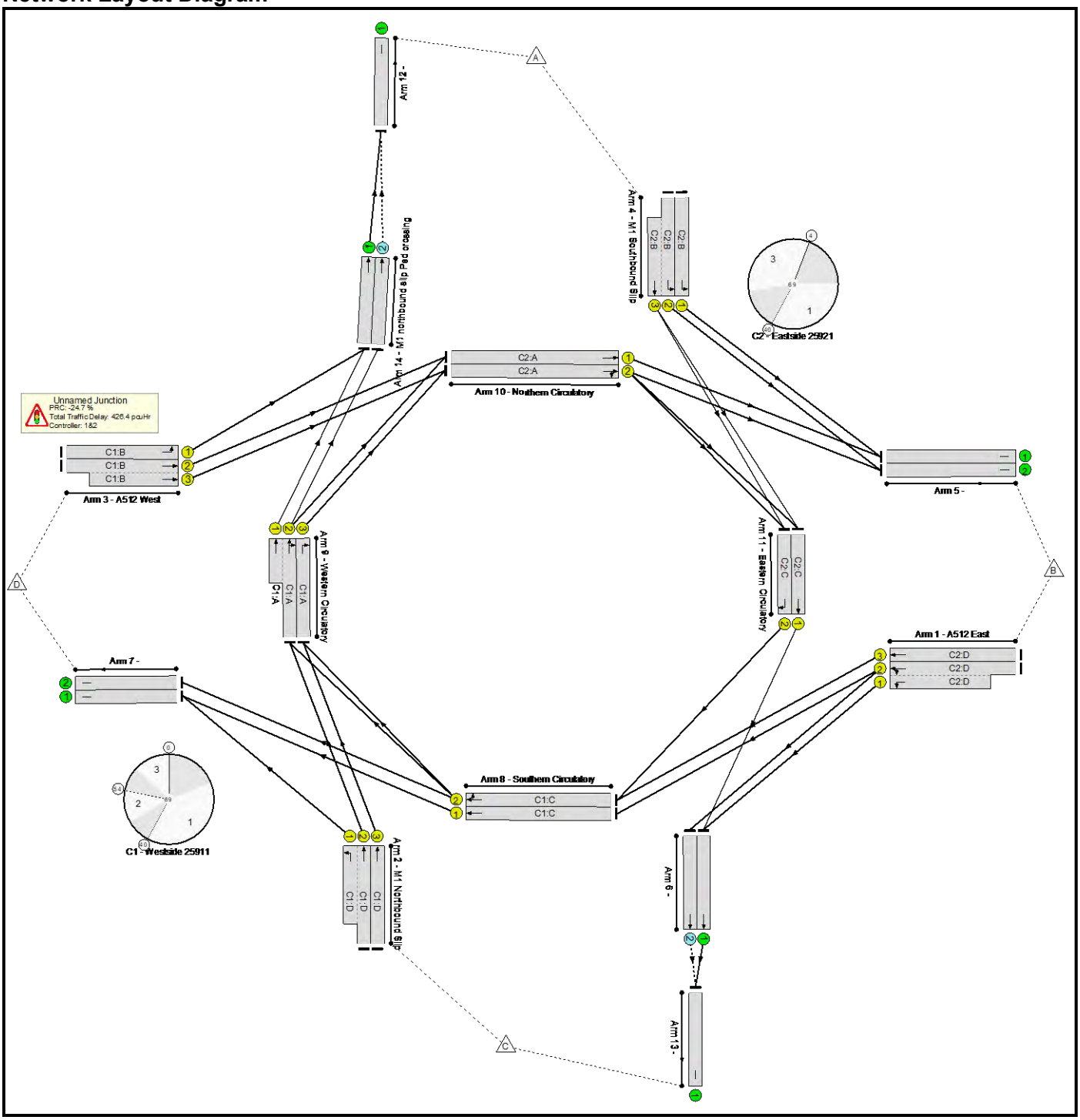
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**112.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**112.2%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	23	-	989	1949:1963	678+256	105.9 : 105.9%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	23	-	689	1955	680	101.3%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	9	-	353	1973:1963	286+56	103.2 : 103.2%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	9	-	295	1979	287	102.9%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	27	-	472	1926	782	60.4%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	27	-	1455	1937:1941	666+658	109.9 : 109.9%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	23	-	727	1937	674	107.9%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	23	-	920	1945:1948	163+678	109.5 : 109.5%
5/1		U	N/A	N/A	-		-	-	-	1754	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	911	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	556	1980	1980	24.9%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	607	0.0%
7/1		U	N/A	N/A	-		-	-	-	776	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	815	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	47	-	718	1961	1364	49.7%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	47	-	1431	1945	1353	100.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	30	-	911	1926:1941	354+683	85.2 : 86.1%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	30	-	295	1932	868	33.0%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	29	-	1027	1953	849	112.1%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	29	-	1018	1937	842	112.2%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	34	-	285	1997	1013	21.9%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	34	-	742	1994	1011	67.0%
12/1		U	N/A	N/A	-		-	-	-	1088	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	556	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	1072	1940	1940	54.7%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	16	1940	482	3.3%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**16**	**0**	**0**	**67.5**	**358.8**	**0.0**	**426.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**16**	**0**	**0**	**67.5**	**358.8**	**0.0**	**426.4**	**-**	**-**	**-**	**-**
1/2+1/1	989	949	-	-	-	7.0	34.7	-	41.7	151.8	14.5	34.7	49.3
1/3	689	680	-	-	-	4.6	15.6	-	20.1	105.2	13.4	15.6	28.9
2/2+2/1	353	344	-	-	-	3.0	12.5	-	15.5	158.1	5.7	12.5	18.1
2/3	295	287	-	-	-	2.7	10.9	-	13.6	166.1	5.8	10.9	16.7
3/1	472	472	-	-	-	2.1	0.8	-	2.9	21.9	7.1	0.8	7.8
3/2+3/3	1455	1324	-	-	-	11.6	70.6	-	82.2	203.4	23.8	70.6	94.4
4/1	727	674	-	-	-	6.7	32.3	-	38.9	192.8	15.0	32.3	47.2
4/2+4/3	920	856	-	-	-	7.0	45.1	-	52.0	203.6	15.3	45.1	60.4
5/1	1523	1523	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	798	798	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	493	493	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	736	736	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	749	749	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	678	678	-	-	-	0.7	0.5	-	1.2	6.3	2.6	0.5	3.1
8/2	1358	1353	-	-	-	2.1	19.6	-	21.7	57.4	26.1	19.6	45.7
9/2+9/1	890	890	-	-	-	2.1	2.9	-	5.0	20.3	11.5	2.9	14.4
9/3	287	287	-	-	-	0.4	0.2	-	0.6	8.1	0.8	0.2	1.0
10/1	952	849	-	-	-	8.1	55.8	-	63.9	241.6	20.2	55.8	76.0
10/2	945	842	-	-	-	8.0	55.6	-	63.6	242.3	20.1	55.6	75.7
11/1	222	222	-	-	-	1.1	0.1	-	1.2	20.3	4.2	0.1	4.3
11/2	678	678	-	-	-	0.4	1.0	-	1.4	7.3	0.8	1.0	1.8
12/1	1076	1076	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	493	493	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	1060	1060	-	-	-	0.0	0.6	-	0.6	2.0	0.5	0.6	1.1
14/2	16	16	16	0	0	0.0	0.0	-	0.0	3.9	0.0	0.0	0.0

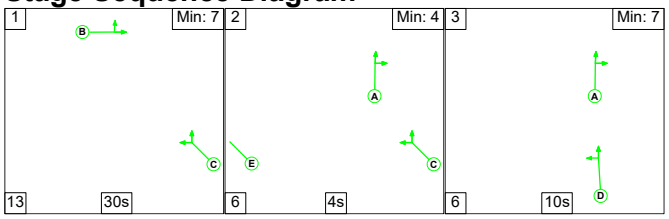
C1 - Westside 25911	PRC for Signalled Lanes (%):	-22.1	Total Delay for Signalled Lanes (pcuHr):	142.70	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	-24.7	Total Delay for Signalled Lanes (pcuHr):	282.91	Cycle Time (s):	69
	PRC Over All Lanes (%):	-24.7	Total Delay Over All Lanes(pcuHr):	426.39		

Full Input Data And Results

Scenario 8: '2038 Without Development Flows (PM)' (FG8: '2038 Without Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

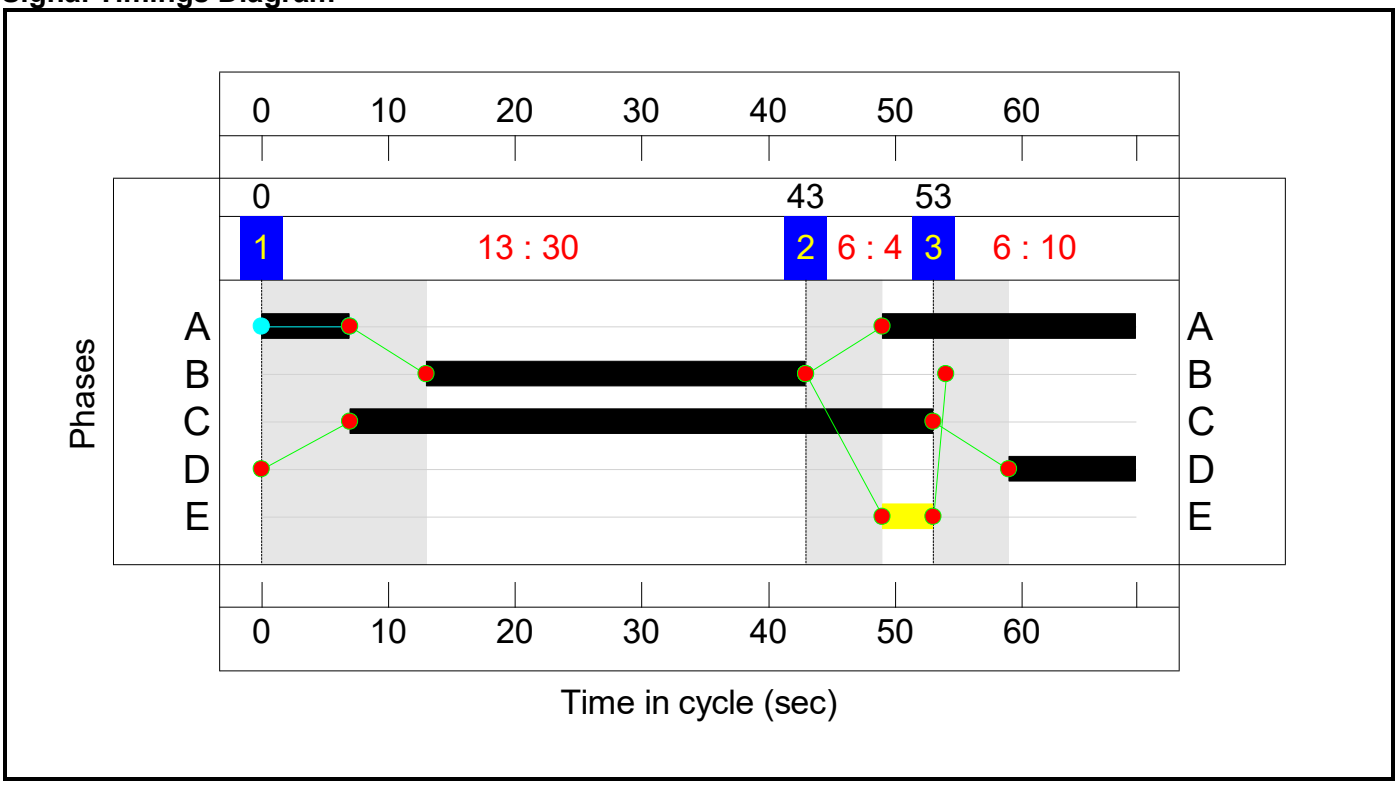
Stage Sequence Diagram



Stage Timings

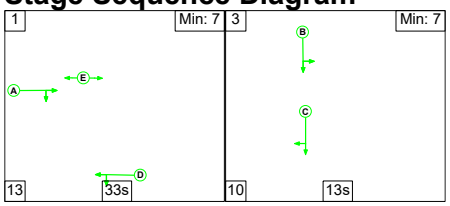
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

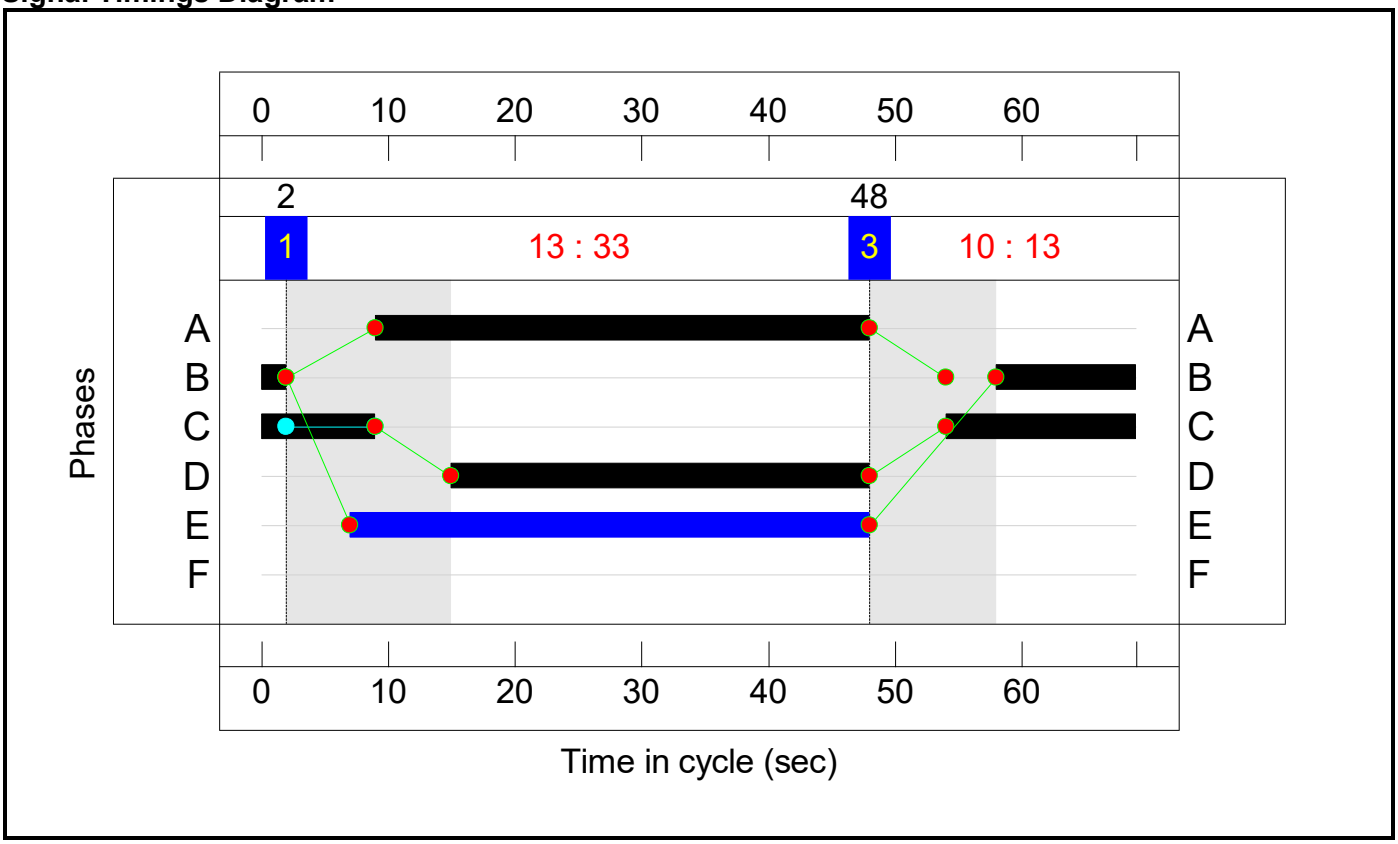


Stage Timings

Stage	1	3
Duration	33	13
Change Point	2	48

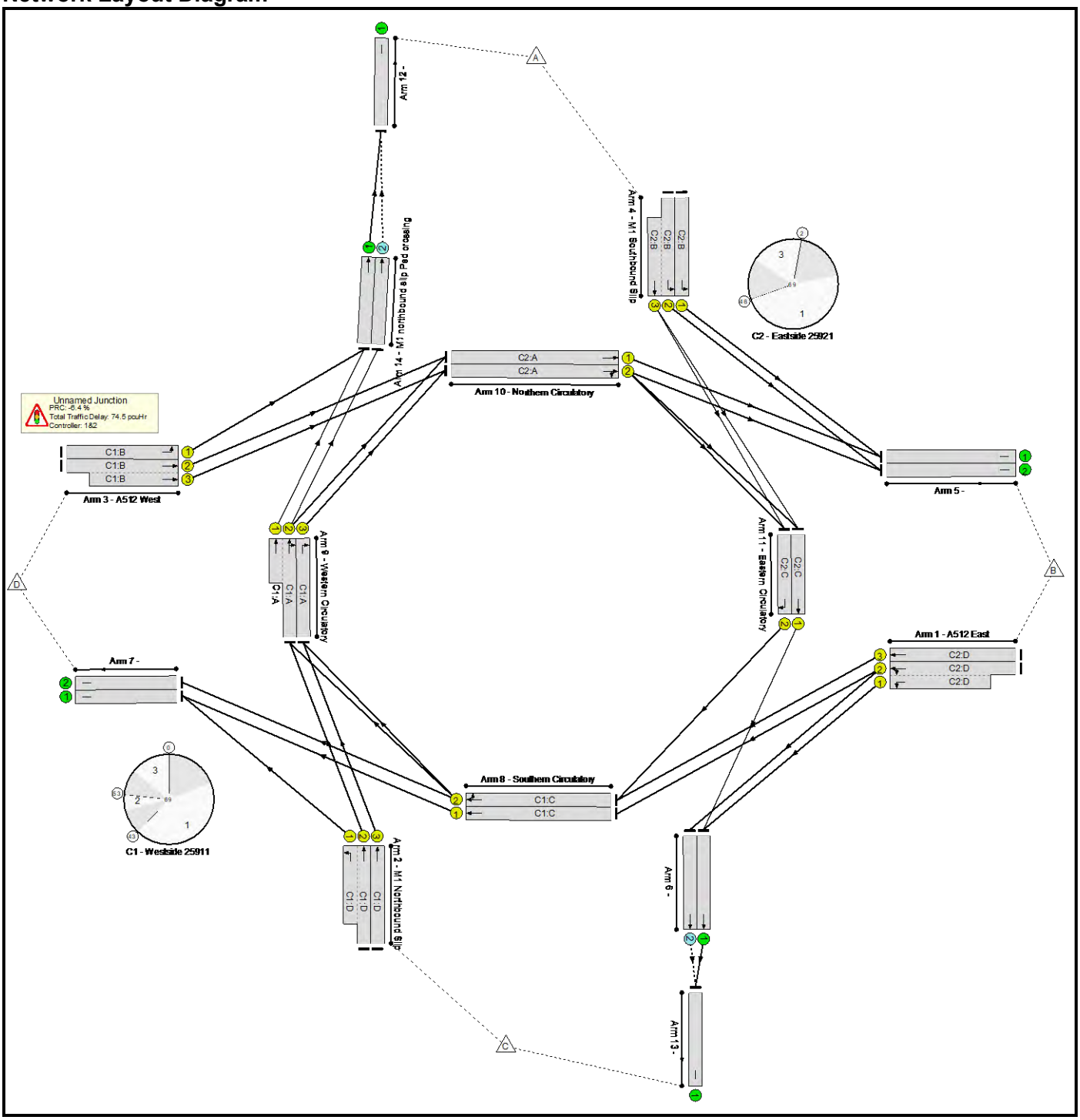
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.8%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.8%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	33	-	1307	1949:1963	905+562	89.1 : 89.1%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	33	-	758	1955	963	78.7%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	370	1973:1963	85+313	93.0 : 93.0%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	286	1979	315	90.7%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	456	1926	865	52.7%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	1296	1937:1941	717+636	95.8 : 95.8%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	13	-	269	1937	393	68.4%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	13	-	657	1945:1948	395+395	89.2 : 77.2%
5/1		U	N/A	N/A	-		-	-	-	1035	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	974	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	774	1980	1980	39.1%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	545	0.0%
7/1		U	N/A	N/A	-		-	-	-	1097	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	423	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	806	1961	1336	60.3%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	1063	1939	1321	80.5%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	719	1926:1941	159+719	82.0 : 82.0%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	286	1932	784	36.5%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	39	-	766	1953	1132	67.7%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	39	-	895	1937	1123	79.7%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	24	-	273	1997	724	37.7%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	24	-	305	1994	722	42.2%
12/1		U	N/A	N/A	-		-	-	-	1096	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	774	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	1045	1940	1940	53.9%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	51	1940	485	10.5%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**51**	**0**	**0**	**37.5**	**37.0**	**0.0**	**74.5**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**51**	**0**	**0**	**37.5**	**37.0**	**0.0**	**74.5**	**-**	**-**	**-**	**-**
1/2+1/1	1307	1307	-	-	-	5.0	3.9	-	8.9	24.6	13.2	3.9	17.1
1/3	758	758	-	-	-	3.1	1.8	-	4.9	23.1	12.0	1.8	13.8
2/2+2/1	370	370	-	-	-	2.9	4.9	-	7.8	75.7	5.5	4.9	10.4
2/3	286	286	-	-	-	2.3	3.8	-	6.1	76.9	5.3	3.8	9.2
3/1	456	456	-	-	-	1.7	0.6	-	2.3	18.1	6.2	0.6	6.8
3/2+3/3	1296	1296	-	-	-	5.7	8.7	-	14.4	39.9	13.3	8.7	21.9
4/1	269	269	-	-	-	1.9	1.1	-	3.0	39.7	4.7	1.1	5.8
4/2+4/3	657	657	-	-	-	4.8	2.4	-	7.2	39.5	6.6	2.4	8.9
5/1	1035	1035	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	974	974	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	774	774	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1097	1097	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	423	423	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	806	806	-	-	-	1.3	0.8	-	2.0	9.0	4.5	0.8	5.3
8/2	1063	1063	-	-	-	1.1	2.0	-	3.1	10.6	6.0	2.0	8.1
9/2+9/1	719	719	-	-	-	3.0	2.2	-	5.2	26.1	13.1	2.2	15.3
9/3	286	286	-	-	-	0.3	0.3	-	0.6	7.3	0.5	0.3	0.8
10/1	766	766	-	-	-	1.5	1.0	-	2.6	12.1	4.5	1.0	5.5
10/2	895	895	-	-	-	1.4	1.9	-	3.3	13.3	6.6	1.9	8.5
11/1	273	273	-	-	-	1.4	0.3	-	1.7	21.9	5.2	0.3	5.5
11/2	305	305	-	-	-	0.2	0.4	-	0.5	6.2	0.3	0.4	0.6
12/1	1096	1096	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	774	774	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	1045	1045	-	-	-	0.0	0.6	-	0.6	2.0	0.5	0.6	1.1
14/2	51	51	51	0	0	0.0	0.1	-	0.1	4.1	0.0	0.1	0.1

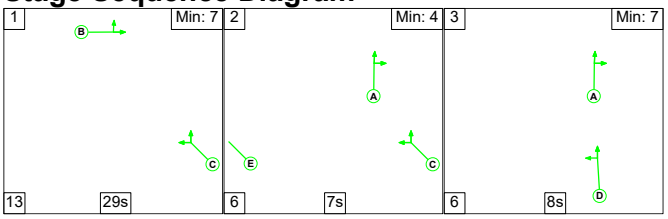
C1 - Westside 25911	PRC for Signalled Lanes (%):	-6.4	Total Delay for Signalled Lanes (pcuHr):	41.51	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	0.9	Total Delay for Signalled Lanes (pcuHr):	32.05	Cycle Time (s):	69
	PRC Over All Lanes (%):	-6.4	Total Delay Over All Lanes(pcuHr):	74.52		

Full Input Data And Results

Scenario 9: '2038 With Development Flows (AM)' (FG9: '2038 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

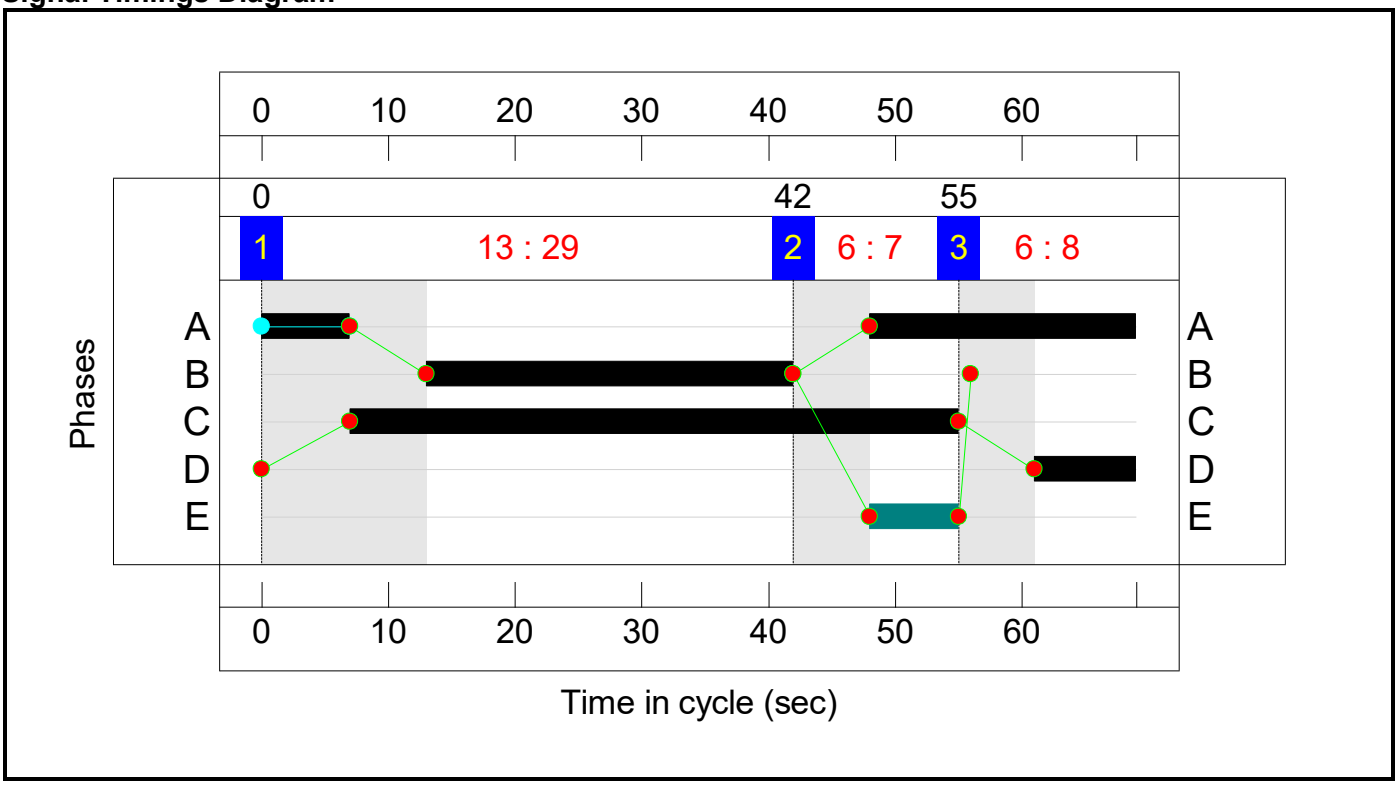
Stage Sequence Diagram



Stage Timings

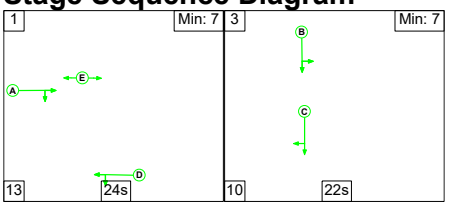
Stage	1	2	3
Duration	29	7	8
Change Point	0	42	55

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

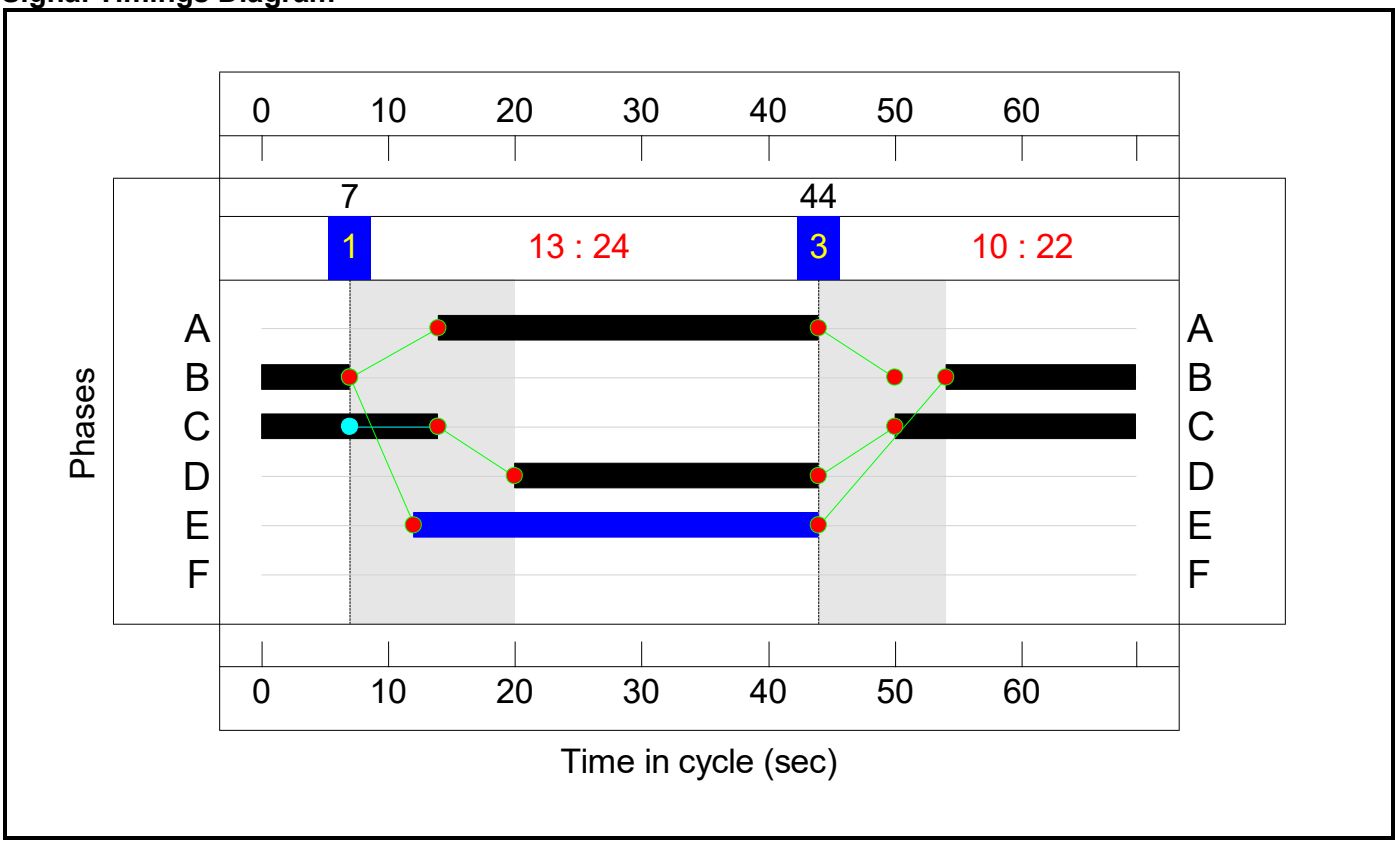


Stage Timings

Stage	1	3
Duration	24	22
Change Point	7	44

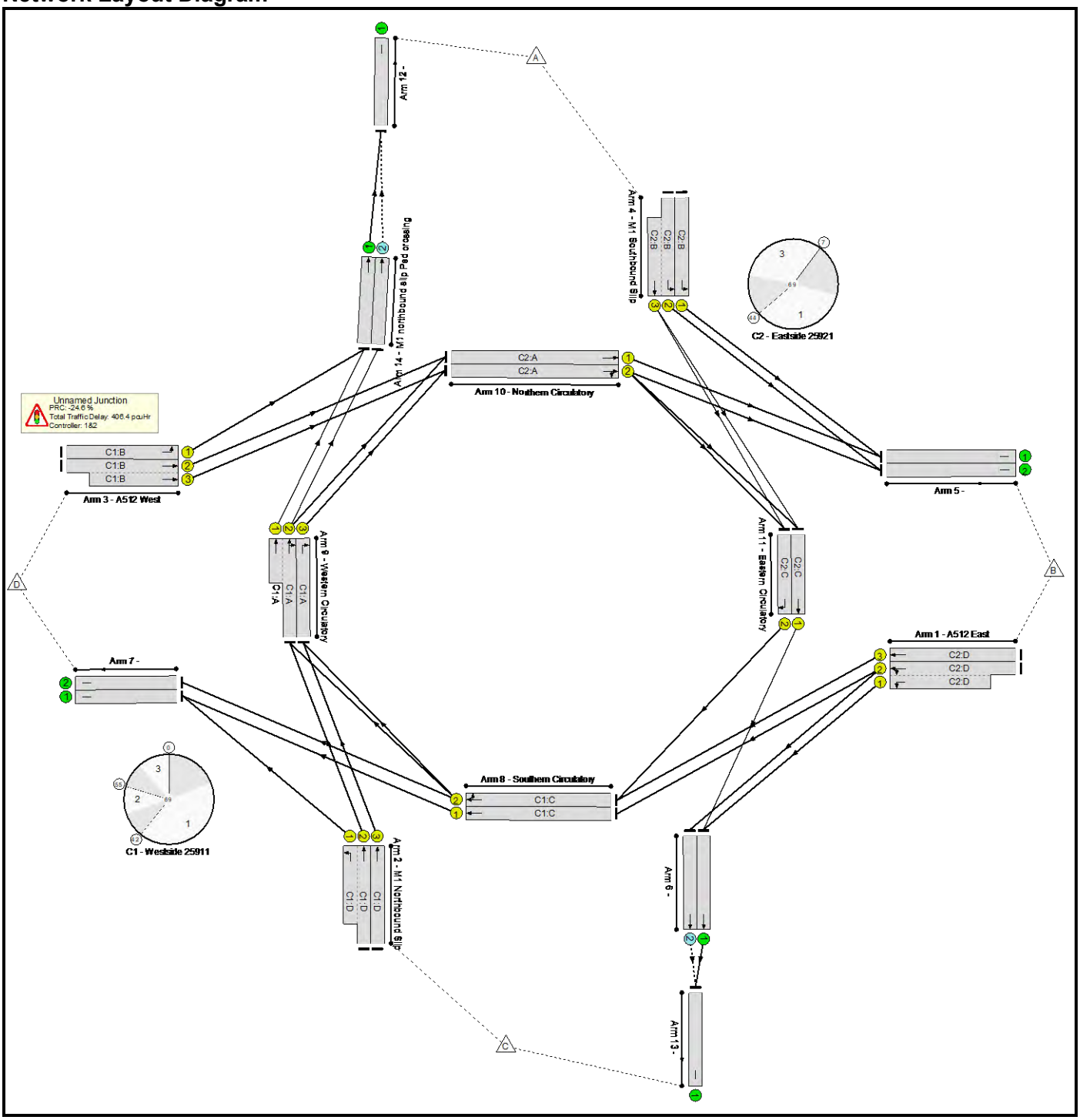
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**112.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**112.1%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	24	-	1006	1949:1963	706+263	103.8 : 103.8%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	24	-	716	1955	708	101.1%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	8	-	346	1973:1963	257+52	111.9 : 111.9%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	8	-	287	1979	258	111.2%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	29	-	485	1926	837	57.9%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	29	-	1482	1937:1941	694+687	107.3 : 107.3%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	22	-	714	1937	646	110.6%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	22	-	931	1945:1948	181+649	112.1 : 112.1%
5/1		U	N/A	N/A	-		-	-	-	1747	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	944	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	556	1980	1980	25.7%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	917	0.0%
7/1		U	N/A	N/A	-		-	-	-	791	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	796	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	48	-	733	1961	1393	50.7%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	48	-	1444	1945	1381	98.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	28	-	936	1926:1941	391+619	84.6 : 91.7%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	28	-	287	1932	812	31.8%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	30	-	1033	1953	877	108.5%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	30	-	1024	1937	870	108.6%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	33	-	283	1997	984	23.9%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	33	-	728	1994	983	66.1%
12/1		U	N/A	N/A	-		-	-	-	1133	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	556	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	1059	1940	1940	54.3%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	74	1940	483	15.1%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**73**	**0**	**0**	**66.1**	**340.2**	**0.0**	**406.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**73**	**0**	**0**	**66.1**	**340.2**	**0.0**	**406.4**	**-**	**-**	**-**	**-**
1/2+1/1	1006	979	-	-	-	6.5	27.5	-	34.0	121.8	14.6	27.5	42.1
1/3	716	708	-	-	-	4.6	15.4	-	20.0	100.7	13.9	15.4	29.3
2/2+2/1	346	315	-	-	-	3.4	22.3	-	25.7	267.7	5.9	22.3	28.2
2/3	287	258	-	-	-	3.5	18.3	-	21.9	274.2	6.4	18.3	24.7
3/1	485	485	-	-	-	2.0	0.7	-	2.7	19.8	7.0	0.7	7.7
3/2+3/3	1482	1381	-	-	-	10.3	57.1	-	67.4	163.6	23.8	57.1	80.9
4/1	714	646	-	-	-	7.2	38.8	-	46.0	231.9	15.0	38.8	53.8
4/2+4/3	931	852	-	-	-	8.3	54.6	-	62.9	243.2	17.4	54.6	72.0
5/1	1523	1523	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	838	838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	509	509	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	764	764	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	717	717	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	706	706	-	-	-	1.1	0.5	-	1.6	8.3	4.2	0.5	4.7
8/2	1358	1358	-	-	-	2.1	13.5	-	15.6	41.2	17.9	13.5	31.3
9/2+9/1	898	898	-	-	-	2.9	3.8	-	6.7	26.8	11.6	3.8	15.4
9/3	258	258	-	-	-	0.4	0.2	-	0.7	9.1	0.8	0.2	1.0
10/1	952	877	-	-	-	6.2	42.7	-	48.9	184.9	19.7	42.7	62.3
10/2	945	870	-	-	-	6.1	42.9	-	49.0	186.6	19.5	42.9	62.4
11/1	236	236	-	-	-	1.1	0.2	-	1.2	18.8	4.5	0.2	4.6
11/2	649	649	-	-	-	0.4	1.0	-	1.3	7.4	0.8	1.0	1.7
12/1	1126	1126	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	509	509	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	1053	1053	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6
14/2	73	73	73	0	0	0.0	0.1	-	0.1	4.4	0.3	0.1	0.4

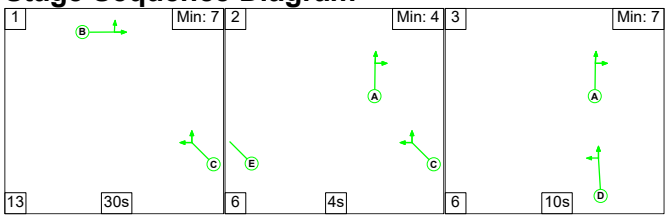
C1 - Westside 25911	PRC for Signalled Lanes (%):	-24.3	Total Delay for Signalled Lanes (pcuHr):	142.13	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	-24.6	Total Delay for Signalled Lanes (pcuHr):	263.38	Cycle Time (s):	69
	PRC Over All Lanes (%):	-24.6	Total Delay Over All Lanes(pcuHr):	406.36		

Full Input Data And Results

Scenario 10: '2038 With Development Flows (PM)' (FG10: '2038 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

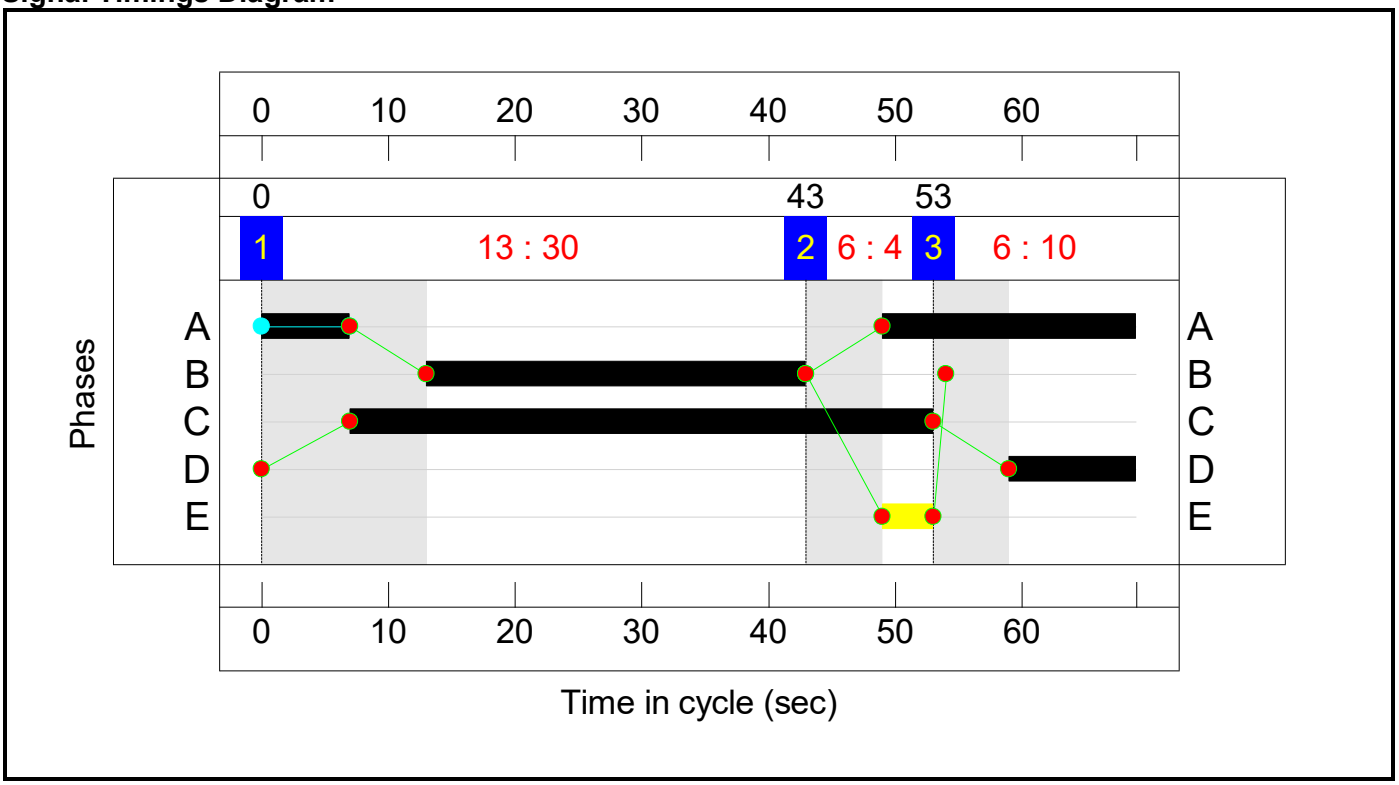
Stage Sequence Diagram



Stage Timings

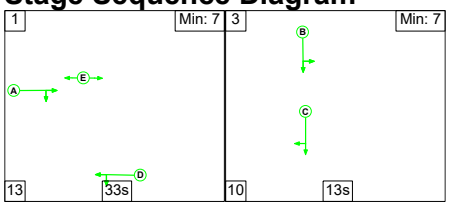
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

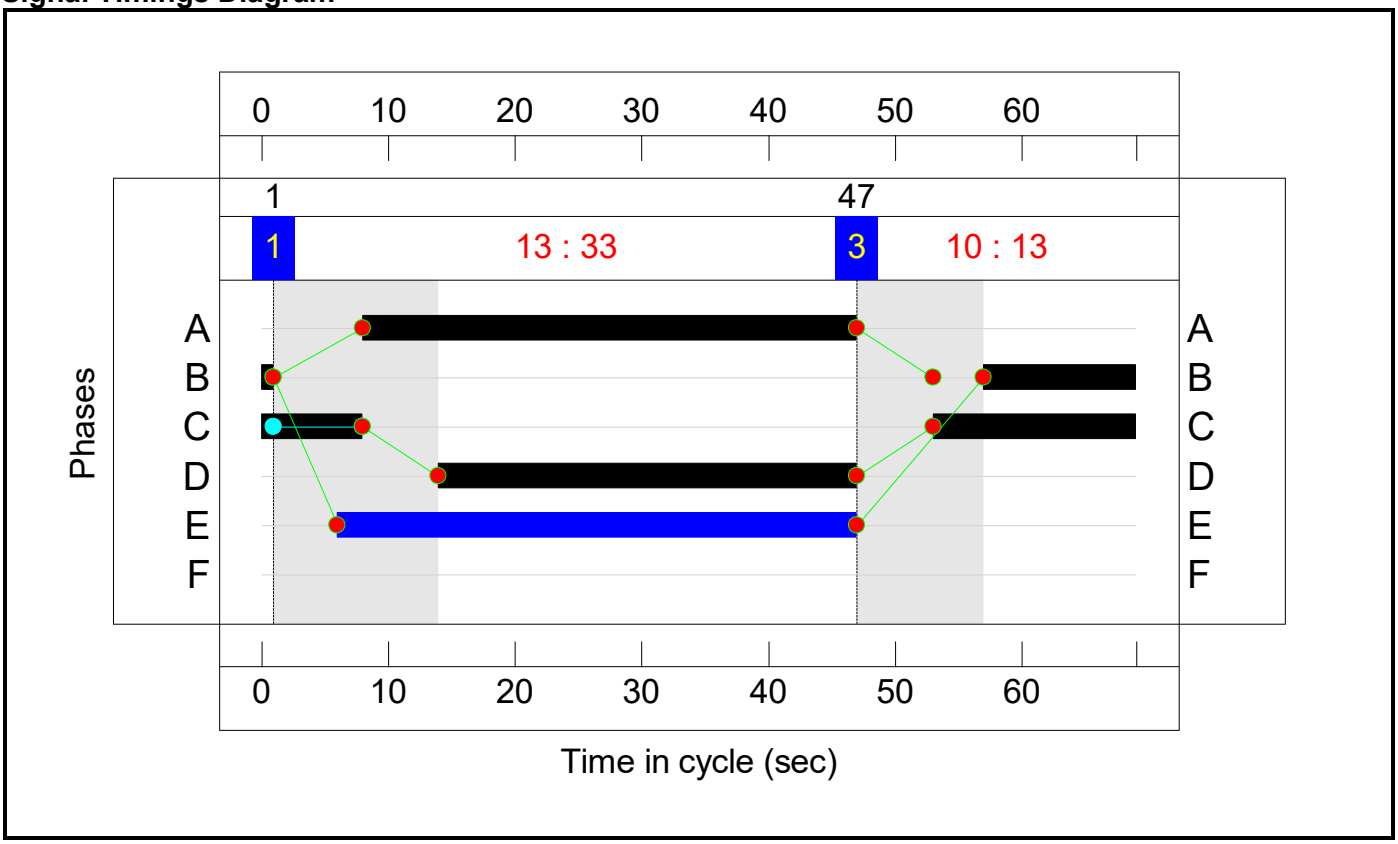


Stage Timings

Stage	1	3
Duration	33	13
Change Point	1	47

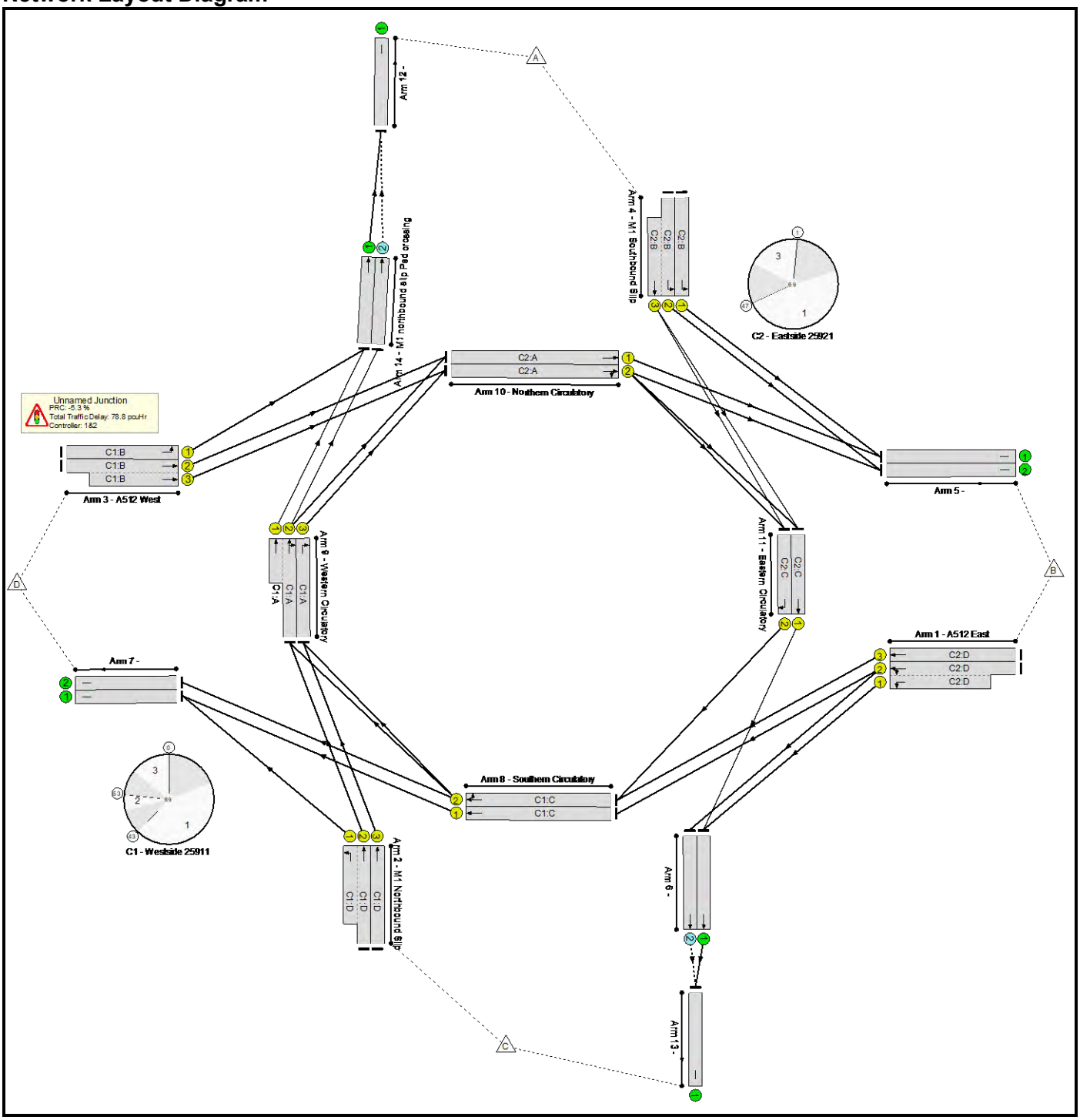
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.8%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.8%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	33	-	1308	1949:1963	906+536	90.7 : 90.7%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	33	-	772	1955	963	80.1%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	358	1973:1963	66+313	94.6 : 94.6%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	294	1979	315	93.2%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	470	1926	865	54.3%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	1282	1937:1941	718+635	94.8 : 94.8%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	13	-	298	1937	393	75.8%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	13	-	694	1945:1948	395+395	90.0 : 85.8%
5/1		U	N/A	N/A	-		-	-	-	1040	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	982	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	755	1980	1980	38.1%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	549	0.0%
7/1		U	N/A	N/A	-		-	-	-	1118	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	460	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	822	1961	1336	61.5%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	1111	1940	1321	84.1%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	713	1926:1941	135+733	82.1 : 82.1%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	294	1932	784	37.5%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	39	-	742	1953	1132	65.5%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	39	-	896	1937	1123	79.8%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	24	-	269	1997	724	37.2%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	24	-	339	1994	722	46.9%
12/1		U	N/A	N/A	-		-	-	-	1121	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	755	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	1072	1940	1940	55.3%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	49	1940	479	10.2%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**49**	**0**	**0**	**38.4**	**40.4**	**0.0**	**78.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**49**	**0**	**0**	**38.4**	**40.4**	**0.0**	**78.8**	**-**	**-**	**-**	**-**
1/2+1/1	1308	1308	-	-	-	5.1	4.6	-	9.7	26.6	13.7	4.6	18.3
1/3	772	772	-	-	-	3.1	2.0	-	5.1	23.9	12.2	2.0	14.2
2/2+2/1	358	358	-	-	-	2.8	5.6	-	8.4	84.8	5.6	5.6	11.2
2/3	294	294	-	-	-	2.3	4.7	-	7.1	86.7	5.6	4.7	10.3
3/1	470	470	-	-	-	1.8	0.6	-	2.4	18.4	6.5	0.6	7.1
3/2+3/3	1282	1282	-	-	-	5.6	7.5	-	13.1	36.7	12.9	7.5	20.4
4/1	298	298	-	-	-	2.1	1.5	-	3.7	44.3	5.4	1.5	6.9
4/2+4/3	694	694	-	-	-	5.1	3.4	-	8.5	44.2	6.6	3.4	10.0
5/1	1040	1040	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	982	982	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	755	755	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1118	1118	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	460	460	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	822	822	-	-	-	1.2	0.8	-	2.0	8.8	4.3	0.8	5.1
8/2	1111	1111	-	-	-	1.1	2.6	-	3.7	12.0	7.6	2.6	10.2
9/2+9/1	713	713	-	-	-	3.0	2.2	-	5.3	26.7	13.1	2.2	15.3
9/3	294	294	-	-	-	0.3	0.3	-	0.6	7.7	0.6	0.3	0.9
10/1	742	742	-	-	-	1.6	0.9	-	2.6	12.6	4.5	0.9	5.4
10/2	896	896	-	-	-	1.4	1.9	-	3.3	13.5	6.0	1.9	7.9
11/1	269	269	-	-	-	1.3	0.3	-	1.6	21.8	5.1	0.3	5.4
11/2	339	339	-	-	-	0.2	0.4	-	0.7	7.2	0.4	0.4	0.8
12/1	1121	1121	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	755	755	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	1072	1072	-	-	-	0.0	0.6	-	0.6	2.1	1.1	0.6	1.7
14/2	49	49	49	0	0	0.0	0.1	-	0.1	4.2	0.0	0.1	0.1

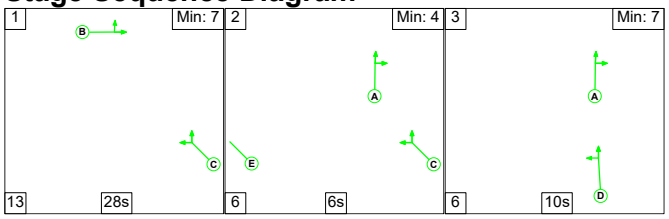
C1 - Westside 25911	PRC for Signalled Lanes (%):	-5.3	Total Delay for Signalled Lanes (pcuHr):	42.59	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	-0.8	Total Delay for Signalled Lanes (pcuHr):	35.23	Cycle Time (s):	69
	PRC Over All Lanes (%):	-5.3	Total Delay Over All Lanes(pcuHr):	78.81		

Full Input Data And Results

Scenario 11: '2a 2028 With Development Flows (AM)' (FG11: '2a 2028 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

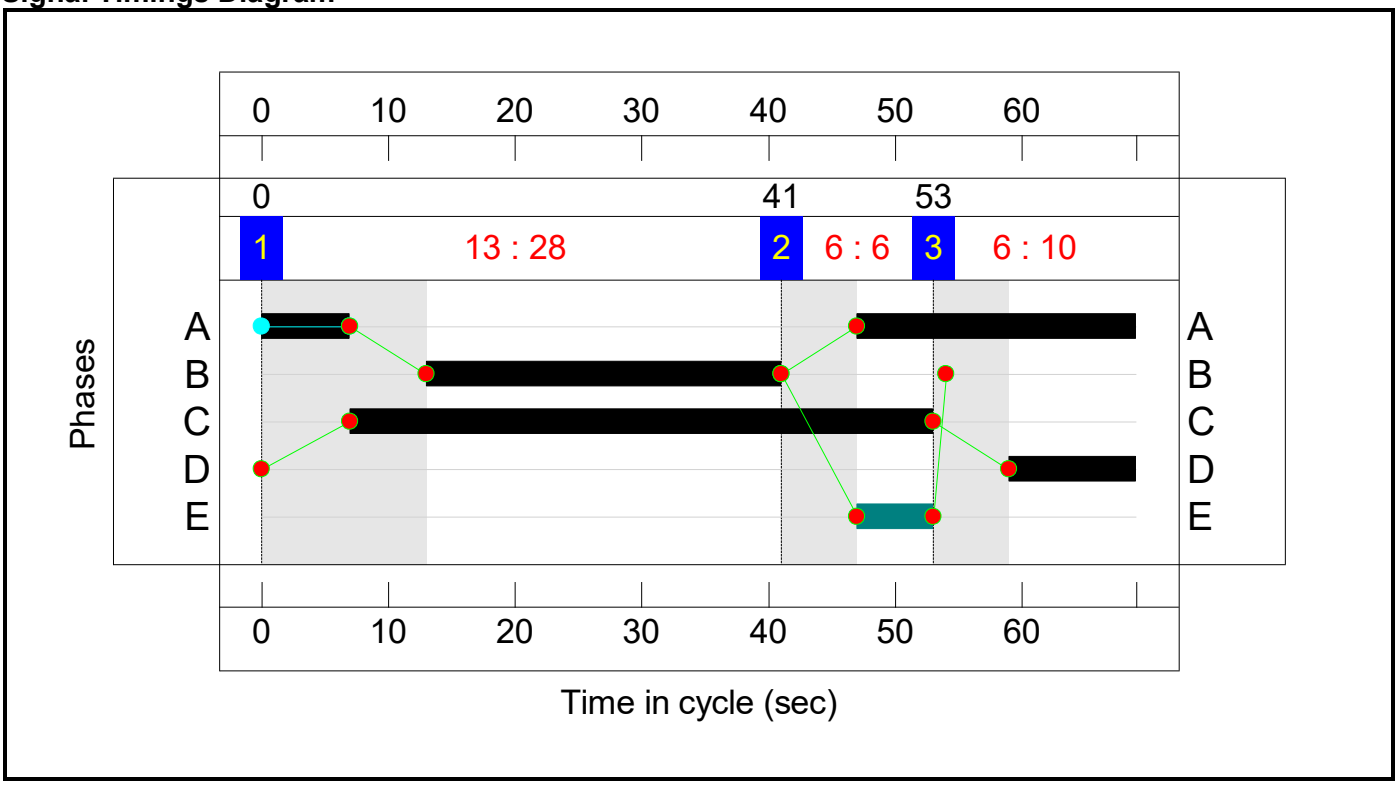
Stage Sequence Diagram



Stage Timings

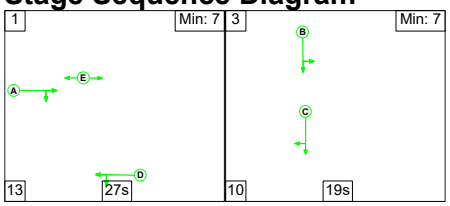
Stage	1	2	3
Duration	28	6	10
Change Point	0	41	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

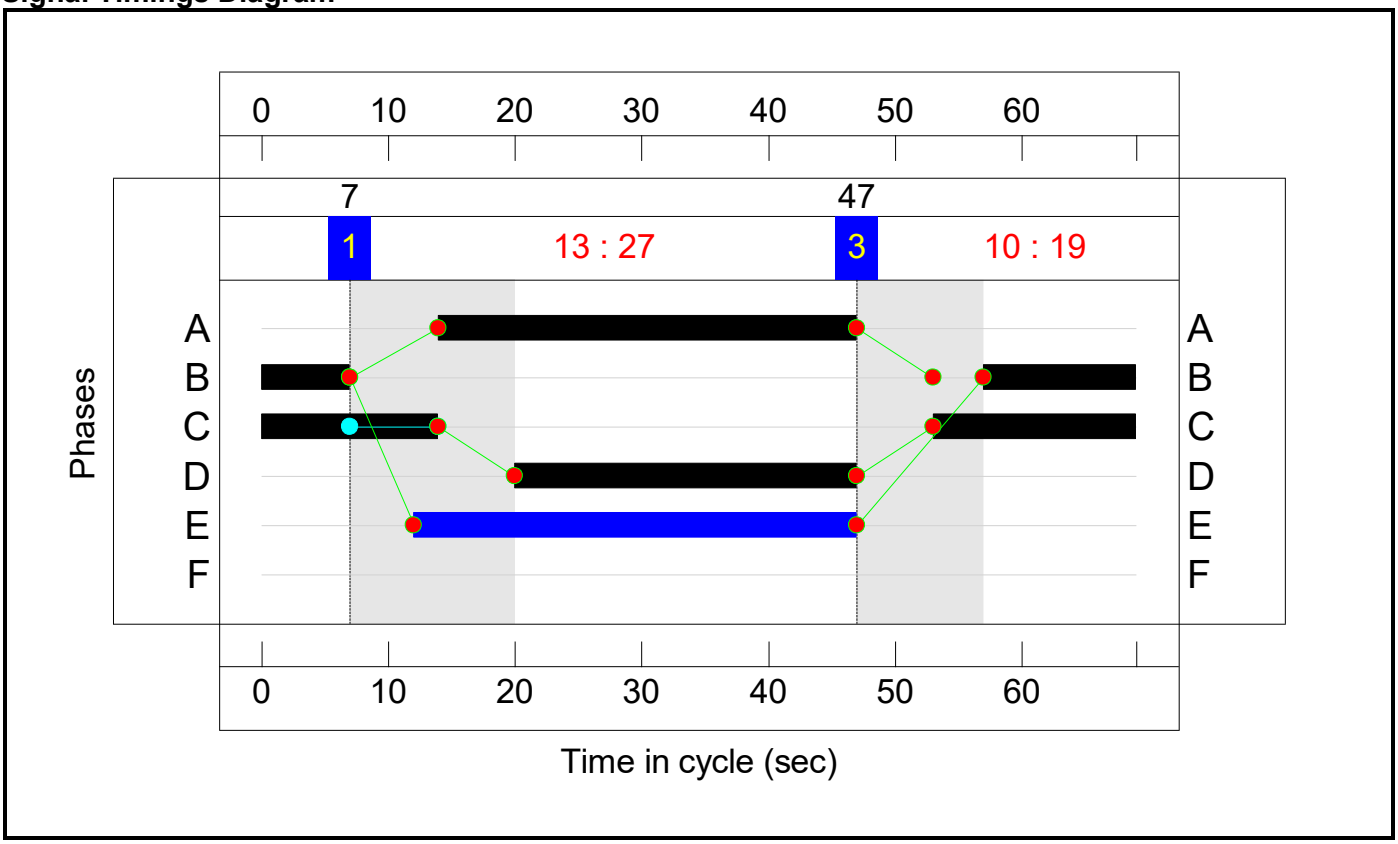


Stage Timings

Stage	1	3
Duration	27	19
Change Point	7	47

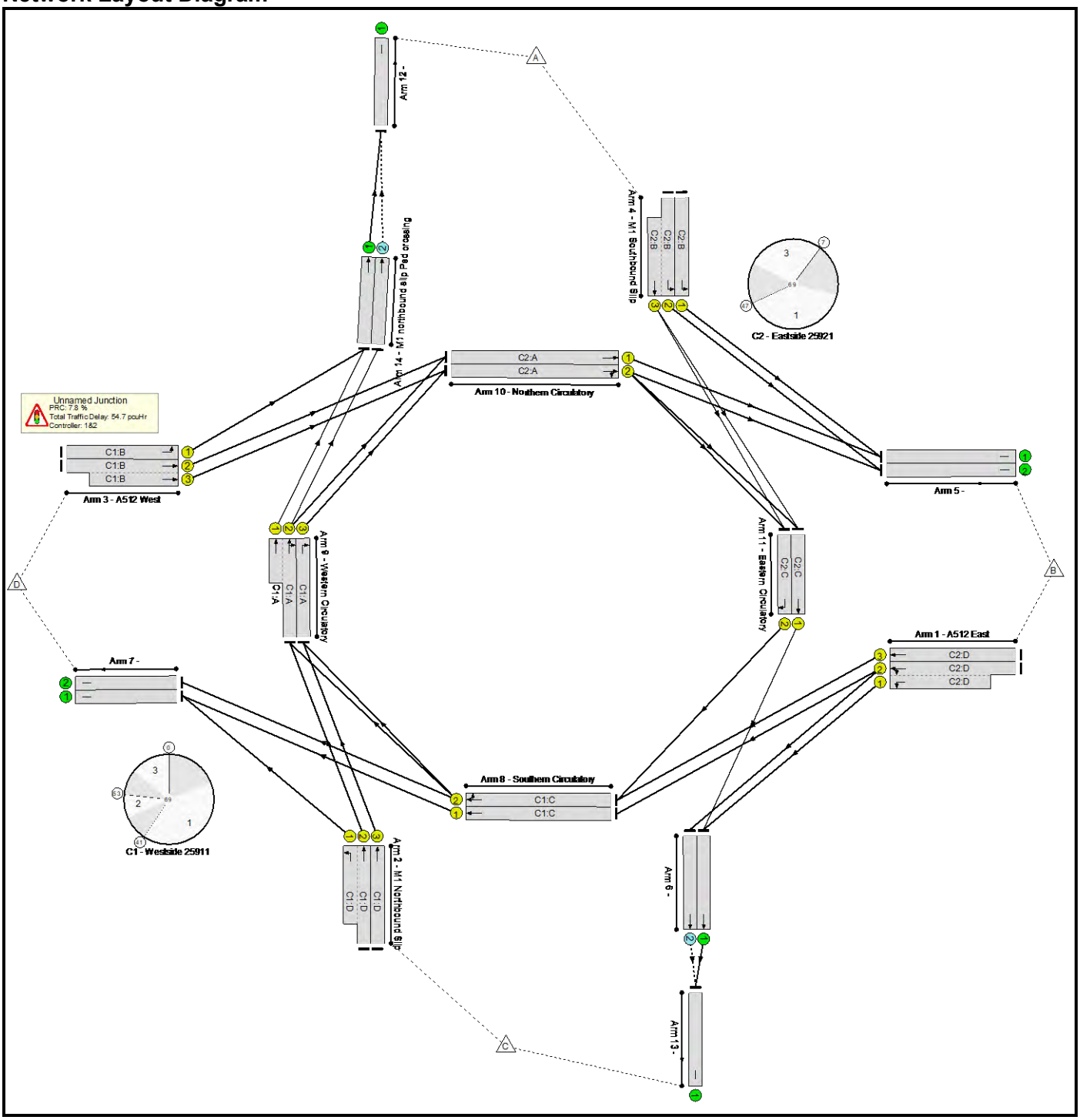
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.5%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	27	-	743	1949:1963	791+291	68.7 : 68.7%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	27	-	592	1955	793	74.6%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	270	1973:1963	315+65	71.2 : 71.2%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	234	1979	315	74.2%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	28	-	371	1926	809	45.8%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	28	-	1130	1937:1941	679+674	83.5 : 83.5%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	19	-	375	1937	561	66.8%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	19	-	934	1945:1948	564+565	82.5 : 83.1%
5/1		U	N/A	N/A	-		-	-	-	1166	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	1085	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	377	1980	1980	19.0%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	632	0.0%
7/1		U	N/A	N/A	-		-	-	-	589	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	469	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	543	1961	1336	40.7%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	1061	1941	1322	80.2%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	29	-	816	1926:1941	339+668	81.0 : 81.0%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	29	-	234	1932	840	27.9%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	33	-	791	1953	962	82.2%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	33	-	797	1937	954	83.5%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	30	-	177	1997	897	19.7%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	30	-	469	1994	896	52.4%
12/1		U	N/A	N/A	-		-	-	-	963	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	377	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	912	1940	1940	47.0%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	51	1940	514	9.9%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**51**	**0**	**0**	**32.7**	**22.0**	**0.0**	**54.7**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**51**	**0**	**0**	**32.7**	**22.0**	**0.0**	**54.7**	**-**	**-**	**-**	**-**
1/2+1/1	743	743	-	-	-	3.3	1.1	-	4.4	21.3	8.4	1.1	9.5
1/3	592	592	-	-	-	2.9	1.4	-	4.3	26.3	9.5	1.4	11.0
2/2+2/1	270	270	-	-	-	2.0	1.2	-	3.2	43.2	4.0	1.2	5.3
2/3	234	234	-	-	-	1.8	1.4	-	3.2	49.0	4.2	1.4	5.6
3/1	371	371	-	-	-	1.5	0.4	-	1.9	18.5	5.0	0.4	5.5
3/2+3/3	1130	1130	-	-	-	5.1	2.5	-	7.6	24.2	8.8	2.5	11.3
4/1	375	375	-	-	-	2.2	1.0	-	3.2	31.1	6.3	1.0	7.2
4/2+4/3	934	934	-	-	-	5.9	2.3	-	8.3	31.9	8.3	2.3	10.7
5/1	1166	1166	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1085	1085	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	377	377	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	589	589	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	469	469	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	543	543	-	-	-	0.7	0.3	-	1.1	7.0	2.7	0.3	3.1
8/2	1061	1061	-	-	-	1.0	2.0	-	3.0	10.1	5.5	2.0	7.5
9/2+9/1	816	816	-	-	-	2.2	2.1	-	4.3	19.0	10.8	2.1	12.9
9/3	234	234	-	-	-	0.2	0.2	-	0.3	5.3	0.3	0.2	0.5
10/1	791	791	-	-	-	1.5	2.2	-	3.7	17.0	6.3	2.2	8.5
10/2	797	797	-	-	-	1.5	2.5	-	4.0	18.0	6.6	2.5	9.1
11/1	177	177	-	-	-	0.7	0.1	-	0.8	16.2	3.3	0.1	3.4
11/2	469	469	-	-	-	0.2	0.5	-	0.7	5.4	0.3	0.5	0.8
12/1	963	963	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	377	377	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	912	912	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
14/2	51	51	51	0	0	0.0	0.1	-	0.1	3.9	0.0	0.1	0.1

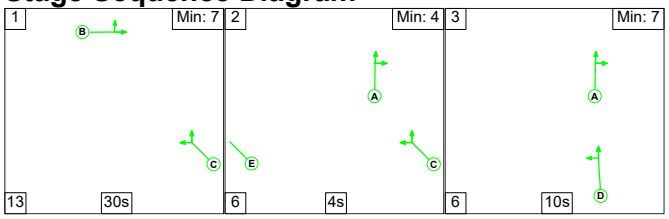
C1 - Westside 25911	PRC for Signalled Lanes (%):	7.8	Total Delay for Signalled Lanes (pcuHr):	24.61	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	7.8	Total Delay for Signalled Lanes (pcuHr):	29.48	Cycle Time (s):	69
	PRC Over All Lanes (%):	7.8	Total Delay Over All Lanes(pcuHr):	54.70		

Full Input Data And Results

Scenario 12: '2a 2028 With Development Flows (PM)' (FG12: '2a 2028 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

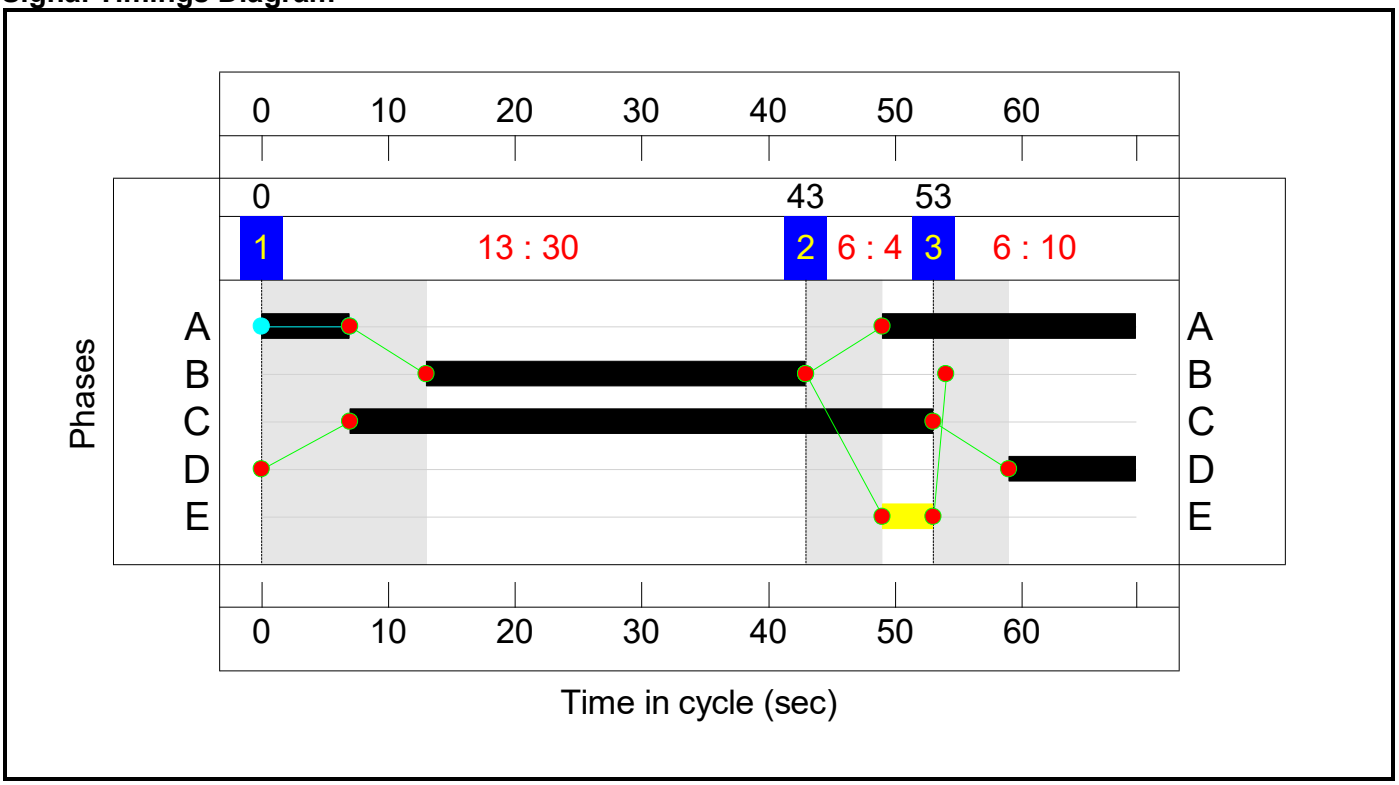
Stage Sequence Diagram



Stage Timings

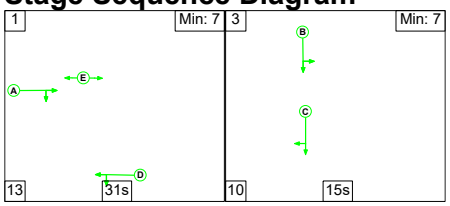
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

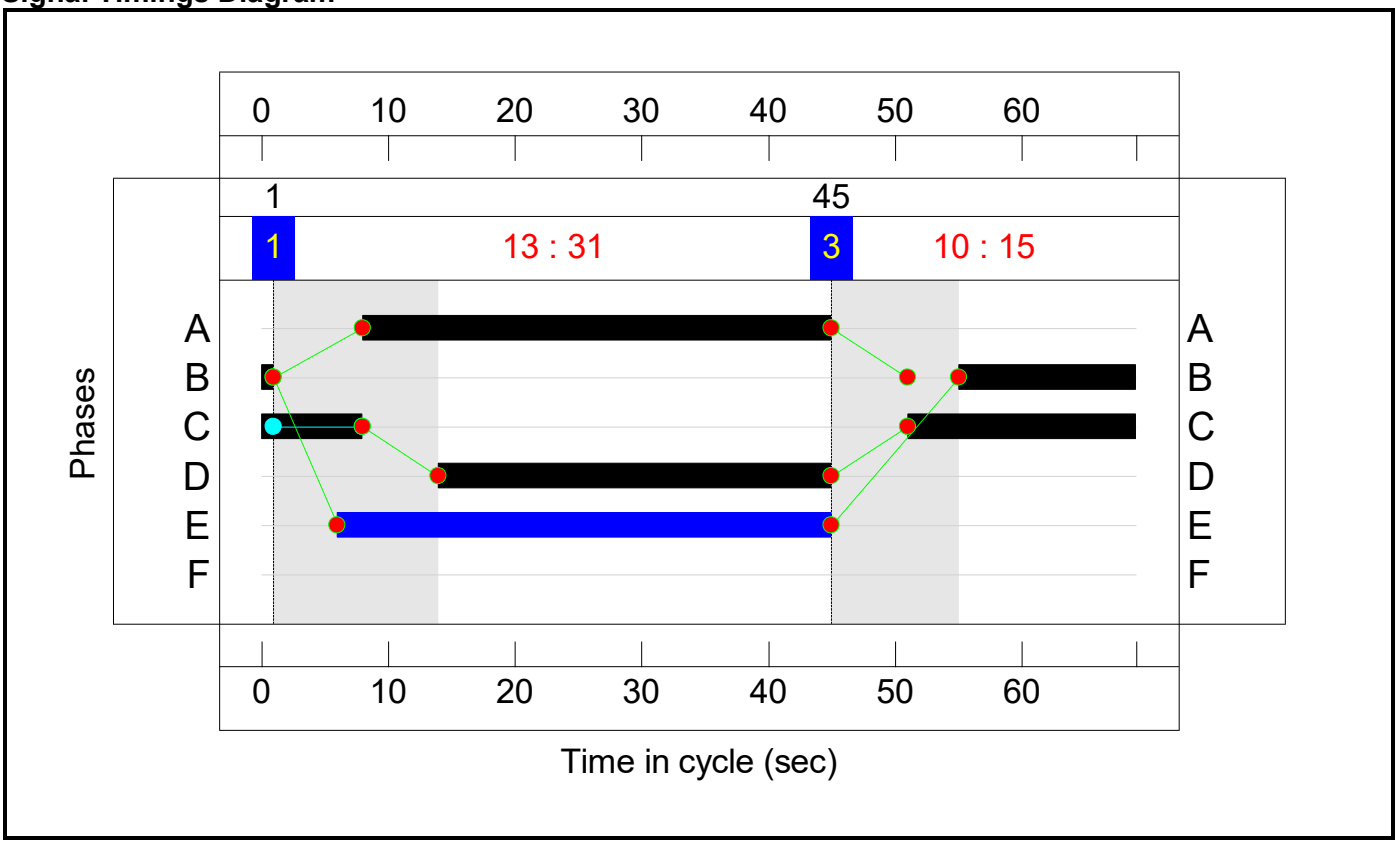


Stage Timings

Stage	1	3
Duration	31	15
Change Point	1	45

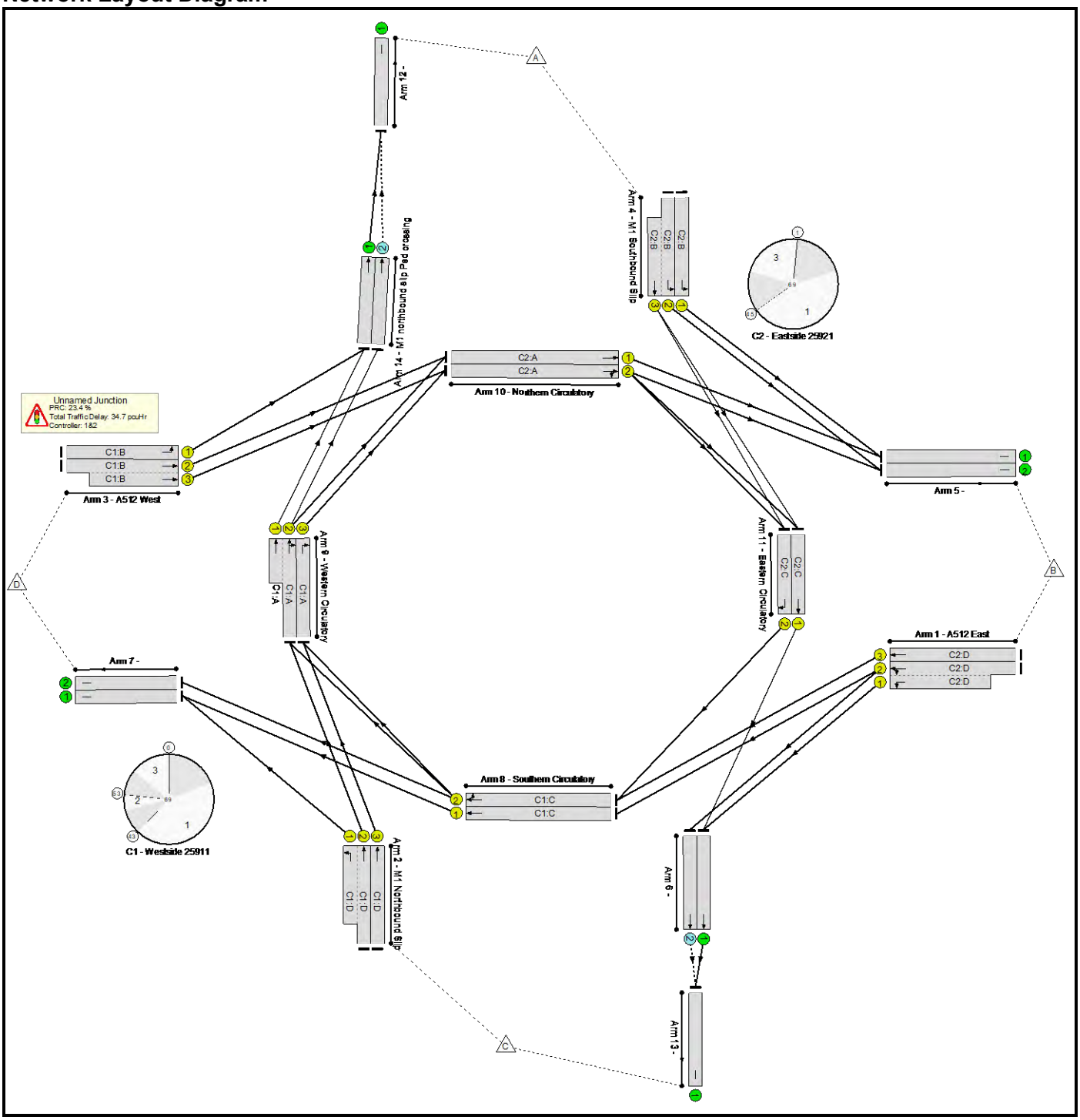
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.9%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.9%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	31	-	997	1949:1963	871+496	72.9 : 72.9%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	31	-	549	1955	907	60.6%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	240	1973:1963	64+313	63.6 : 63.6%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	178	1979	315	56.4%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	329	1926	865	38.0%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	836	1937:1941	706+706	59.2 : 59.2%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	15	-	213	1937	449	47.4%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	15	-	618	1945:1948	451+452	72.5 : 64.4%
5/1		U	N/A	N/A	-		-	-	-	672	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	737	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	548	1980	1980	27.7%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	594	0.0%
7/1		U	N/A	N/A	-		-	-	-	834	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	346	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	635	1961	1336	47.5%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	840	1940	1321	63.6%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	535	1926:1941	204+692	59.7 : 59.7%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	178	1932	784	22.7%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	37	-	459	1953	1076	42.7%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	37	-	596	1937	1067	55.9%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	26	-	186	1997	781	23.8%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	26	-	291	1994	780	37.3%
12/1		U	N/A	N/A	-		-	-	-	823	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	548	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	742	1940	1940	38.2%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	81	1940	552	14.7%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**81**	**0**	**0**	**24.3**	**10.4**	**0.0**	**34.7**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**81**	**0**	**0**	**24.3**	**10.4**	**0.0**	**34.7**	**-**	**-**	**-**	**-**
1/2+1/1	997	997	-	-	-	3.8	1.3	-	5.2	18.6	9.5	1.3	10.9
1/3	549	549	-	-	-	2.1	0.8	-	2.9	18.8	7.8	0.8	8.5
2/2+2/1	240	240	-	-	-	1.8	0.9	-	2.6	39.7	3.5	0.9	4.4
2/3	178	178	-	-	-	1.3	0.6	-	2.0	39.8	3.1	0.6	3.8
3/1	329	329	-	-	-	1.2	0.3	-	1.5	16.0	4.1	0.3	4.4
3/2+3/3	836	836	-	-	-	3.1	0.7	-	3.8	16.5	5.6	0.7	6.3
4/1	213	213	-	-	-	1.4	0.4	-	1.8	30.5	3.5	0.4	3.9
4/2+4/3	618	618	-	-	-	4.2	1.1	-	5.2	30.5	5.7	1.1	6.8
5/1	672	672	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	737	737	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	548	548	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	834	834	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	346	346	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	635	635	-	-	-	0.6	0.5	-	1.0	5.9	2.3	0.5	2.7
8/2	840	840	-	-	-	0.5	0.9	-	1.4	5.9	2.9	0.9	3.8
9/2+9/1	535	535	-	-	-	1.7	0.7	-	2.5	16.6	8.4	0.7	9.2
9/3	178	178	-	-	-	0.1	0.1	-	0.2	4.7	0.2	0.1	0.3
10/1	459	459	-	-	-	0.8	0.4	-	1.2	9.4	2.4	0.4	2.7
10/2	596	596	-	-	-	0.9	0.6	-	1.5	9.0	2.7	0.6	3.3
11/1	186	186	-	-	-	0.8	0.2	-	1.0	18.9	3.5	0.2	3.7
11/2	291	291	-	-	-	0.1	0.3	-	0.4	4.8	0.2	0.3	0.5
12/1	823	823	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	548	548	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	742	742	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
14/2	81	81	81	0	0	0.0	0.1	-	0.1	4.0	0.6	0.1	0.7

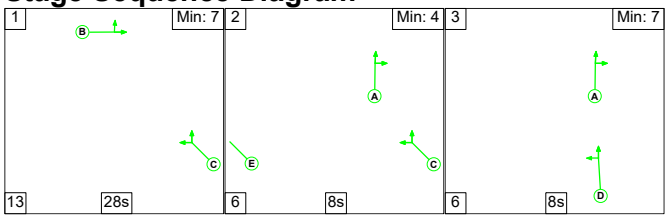
C1 - Westside 25911	PRC for Signalled Lanes (%):	41.5	Total Delay for Signalled Lanes (pcuHr):	15.02	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	23.4	Total Delay for Signalled Lanes (pcuHr):	19.11	Cycle Time (s):	69
	PRC Over All Lanes (%):	23.4	Total Delay Over All Lanes(pcuHr):	34.72		

Full Input Data And Results

Scenario 13: '2a 2038 With Development Flows (AM)' (FG13: '2a 2038 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

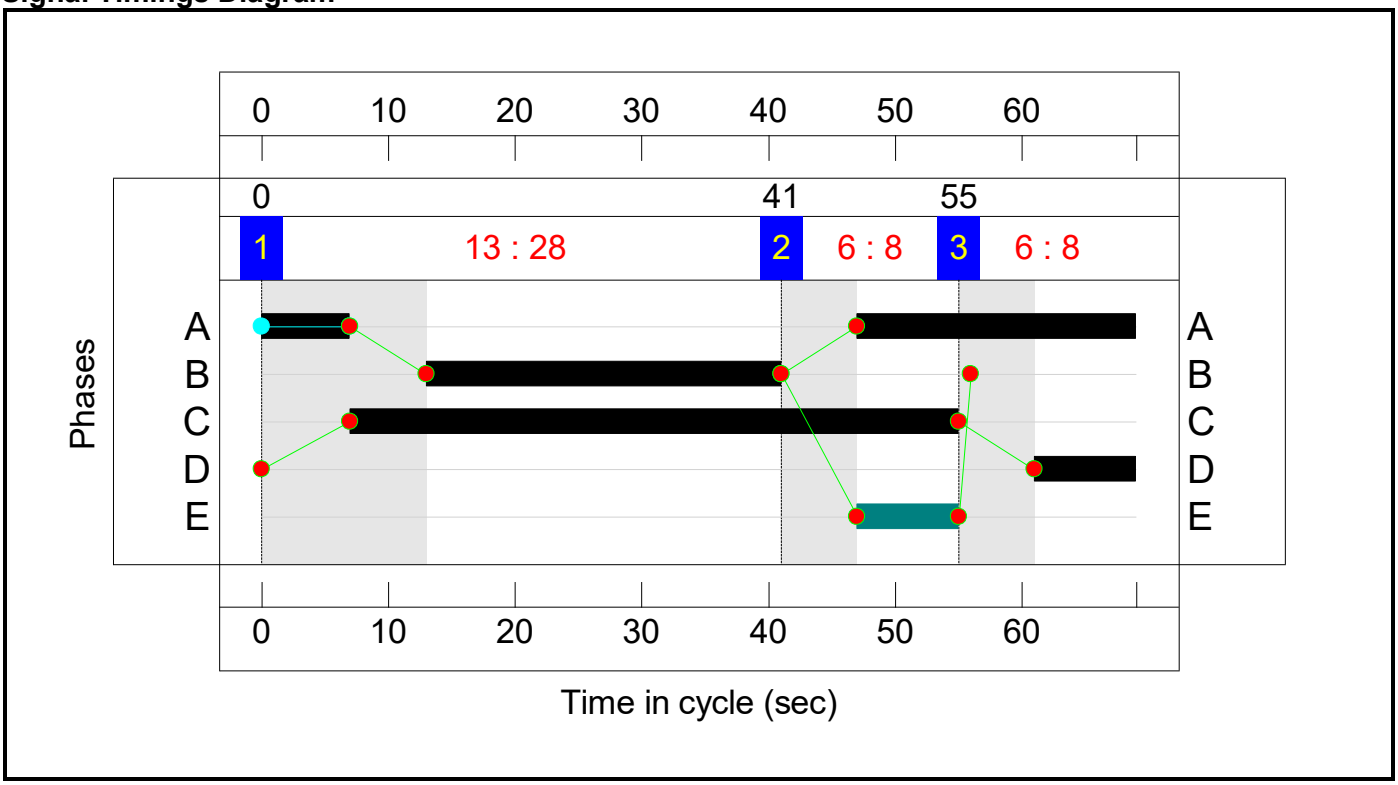
Stage Sequence Diagram



Stage Timings

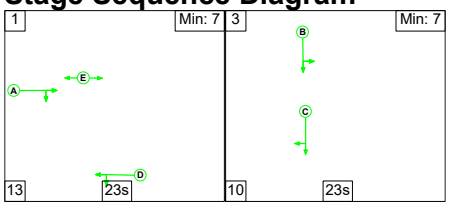
Stage	1	2	3
Duration	28	8	8
Change Point	0	41	55

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

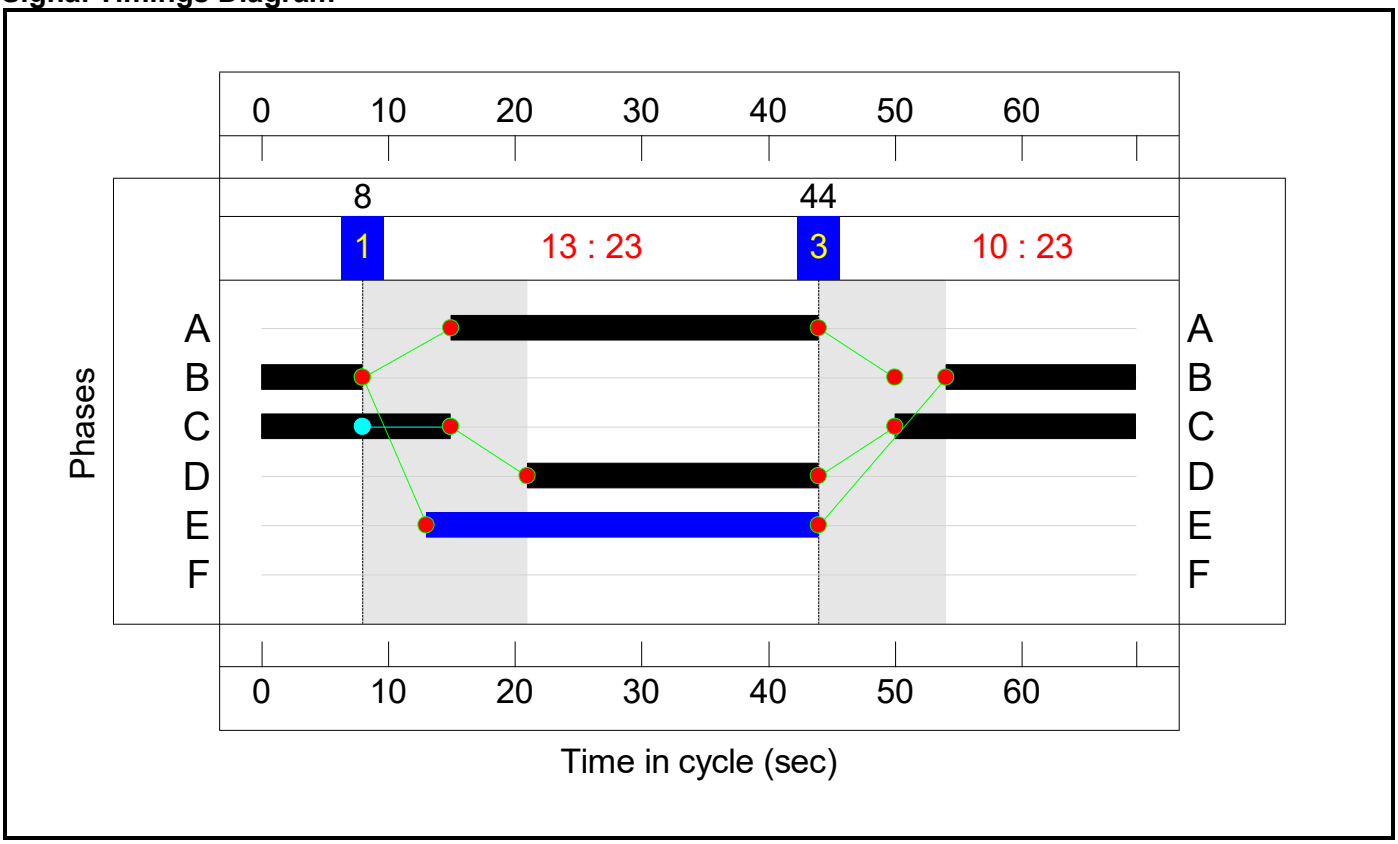


Stage Timings

Stage	1	3
Duration	23	23
Change Point	8	44

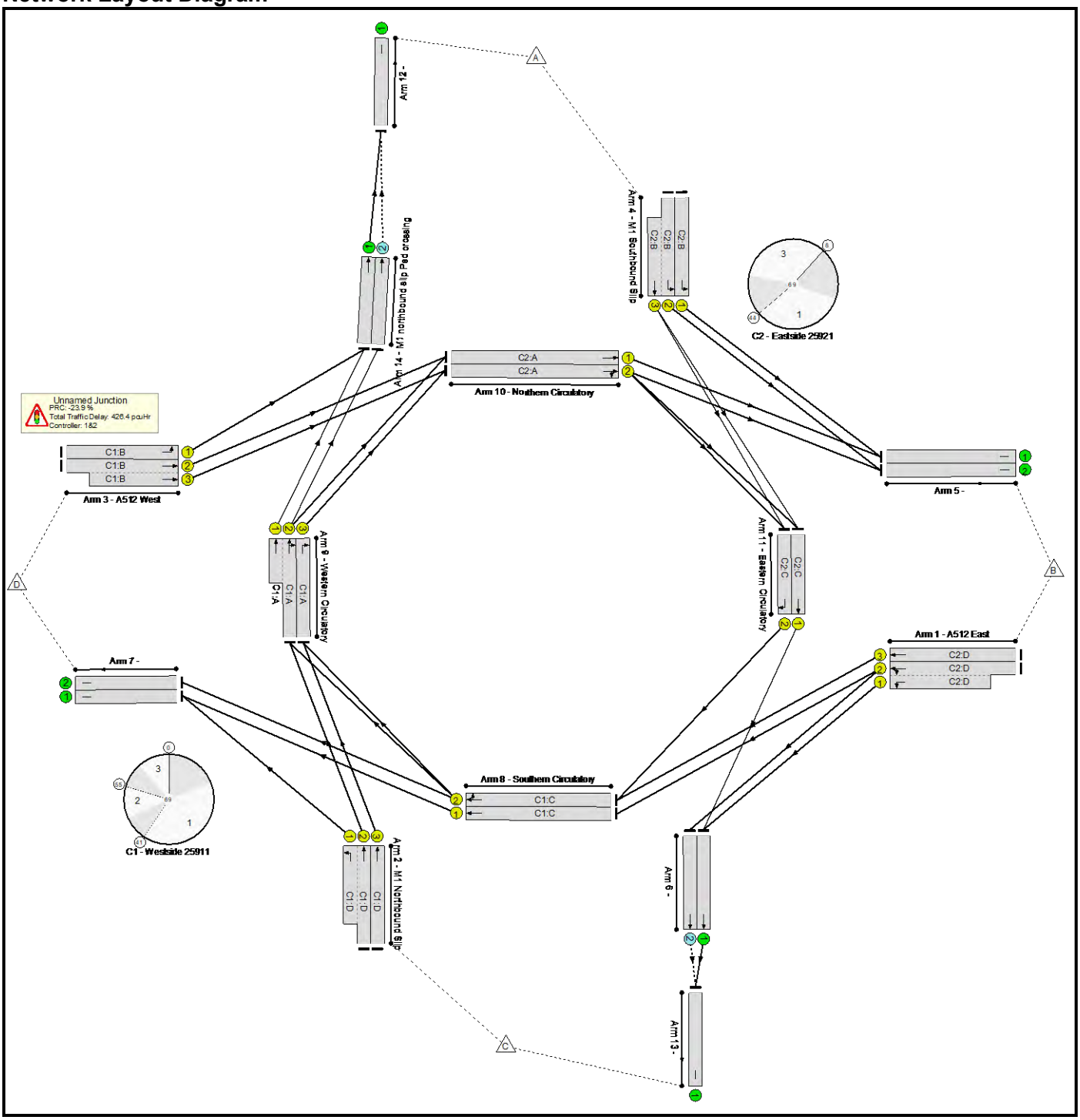
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**111.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**111.5%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	23	-	987	1949:1963	678+251	106.2 : 106.2%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	23	-	693	1955	680	101.9%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	8	-	338	1973:1963	257+53	108.8 : 108.8%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	8	-	281	1979	258	108.9%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	28	-	480	1926	809	59.3%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	28	-	1508	1937:1941	680+673	111.5 : 111.5%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	23	-	722	1937	674	107.2%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	23	-	929	1945:1948	177+678	108.8 : 108.8%
5/1		U	N/A	N/A	-		-	-	-	1760	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	934	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	556	1980	1980	24.9%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	921	0.0%
7/1		U	N/A	N/A	-		-	-	-	778	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	813	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	48	-	720	1961	1393	48.7%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	48	-	1430	1945	1381	98.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	29	-	897	1926:1941	396+639	80.6 : 85.0%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	29	-	281	1932	840	30.7%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	29	-	1038	1953	849	110.4%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	29	-	1031	1937	842	110.5%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	34	-	289	1997	1013	22.3%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	34	-	737	1994	1011	67.0%
12/1		U	N/A	N/A	-		-	-	-	1097	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	556	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	1034	1940	1940	52.8%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	63	1940	490	12.6%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**62**	**0**	**0**	**67.2**	**359.2**	**0.0**	**426.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**62**	**0**	**0**	**67.2**	**359.2**	**0.0**	**426.4**	**-**	**-**	**-**	**-**
1/2+1/1	987	945	-	-	-	7.0	35.7	-	42.7	155.8	14.6	35.7	50.4
1/3	693	680	-	-	-	4.7	16.8	-	21.5	111.8	13.5	16.8	30.3
2/2+2/1	338	315	-	-	-	3.2	18.3	-	21.5	229.1	5.6	18.3	23.9
2/3	281	258	-	-	-	3.2	15.9	-	19.1	244.6	6.0	15.9	21.9
3/1	480	480	-	-	-	2.1	0.7	-	2.8	20.9	7.1	0.7	7.8
3/2+3/3	1508	1353	-	-	-	12.3	82.2	-	94.6	225.7	25.4	82.2	107.6
4/1	722	674	-	-	-	6.4	30.1	-	36.5	182.0	14.8	30.1	44.9
4/2+4/3	929	870	-	-	-	7.6	42.9	-	50.5	195.7	16.9	42.9	59.7
5/1	1523	1523	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	808	808	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	493	493	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	736	736	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	752	752	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	678	678	-	-	-	1.1	0.5	-	1.6	8.4	4.2	0.5	4.7
8/2	1358	1358	-	-	-	2.1	13.4	-	15.6	41.3	18.4	13.4	31.8
9/2+9/1	863	863	-	-	-	2.5	2.4	-	5.0	20.8	11.1	2.4	13.5
9/3	258	258	-	-	-	0.4	0.2	-	0.6	8.8	0.8	0.2	1.0
10/1	937	849	-	-	-	6.6	48.9	-	55.5	213.2	19.7	48.9	68.6
10/2	931	842	-	-	-	6.5	49.1	-	55.7	215.2	19.5	49.1	68.7
11/1	226	226	-	-	-	1.0	0.1	-	1.1	18.3	4.2	0.1	4.4
11/2	678	678	-	-	-	0.4	1.0	-	1.4	7.3	0.8	1.0	1.8
12/1	1085	1085	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	493	493	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	1024	1024	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6
14/2	62	62	62	0	0	0.0	0.1	-	0.1	4.2	0.0	0.1	0.1

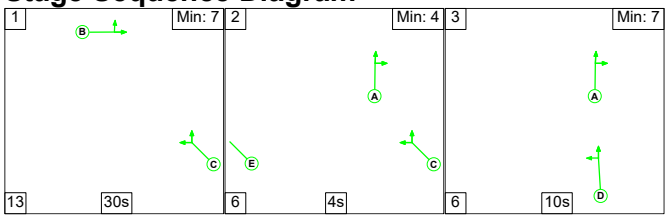
C1 - Westside 25911	PRC for Signalled Lanes (%):	-23.9	Total Delay for Signalled Lanes (pcuHr):	160.70	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	-22.8	Total Delay for Signalled Lanes (pcuHr):	264.92	Cycle Time (s):	69
	PRC Over All Lanes (%):	-23.9	Total Delay Over All Lanes(pcuHr):	426.42		

Full Input Data And Results

Scenario 14: '2a 2038 With Development Flows (PM)' (FG14: '2a 2038 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

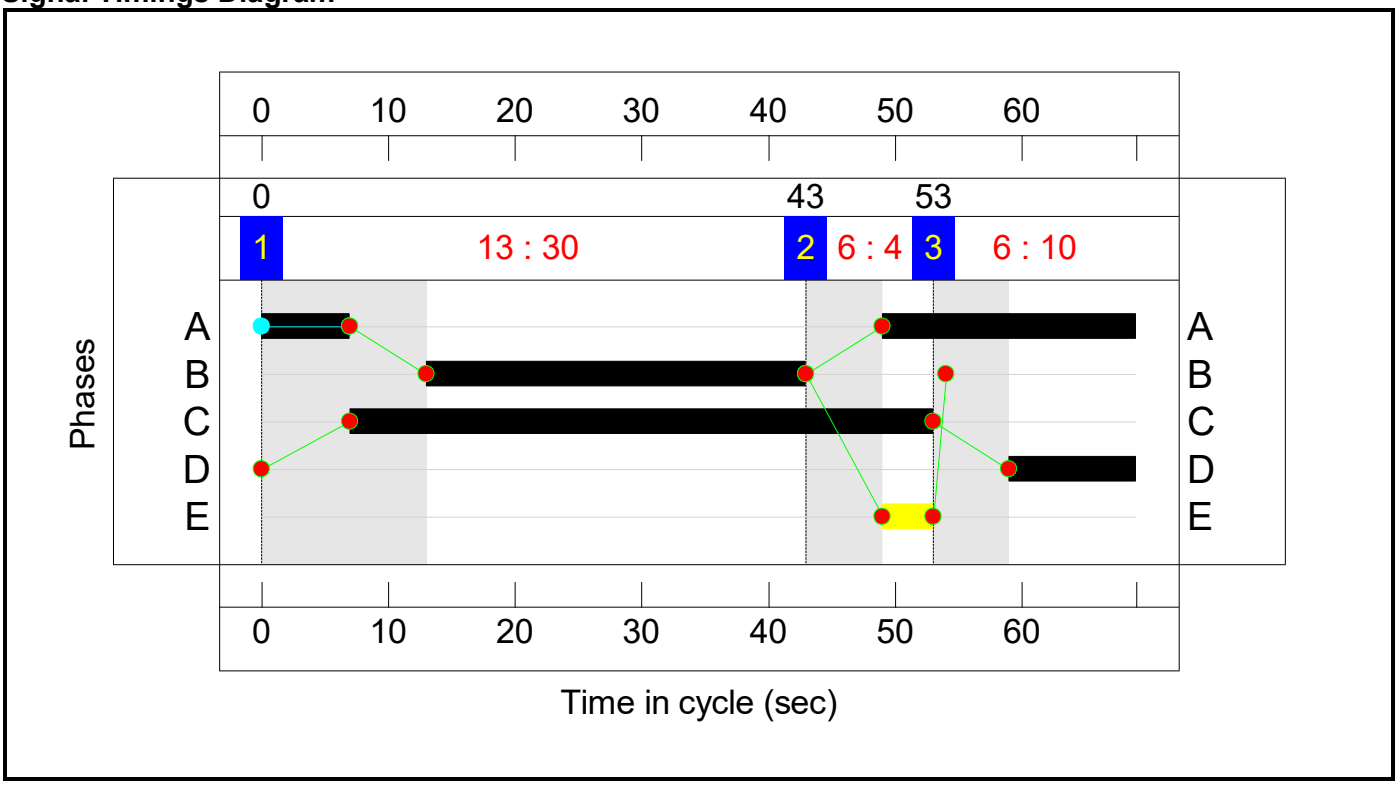
Stage Sequence Diagram



Stage Timings

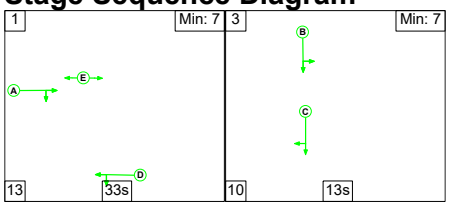
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

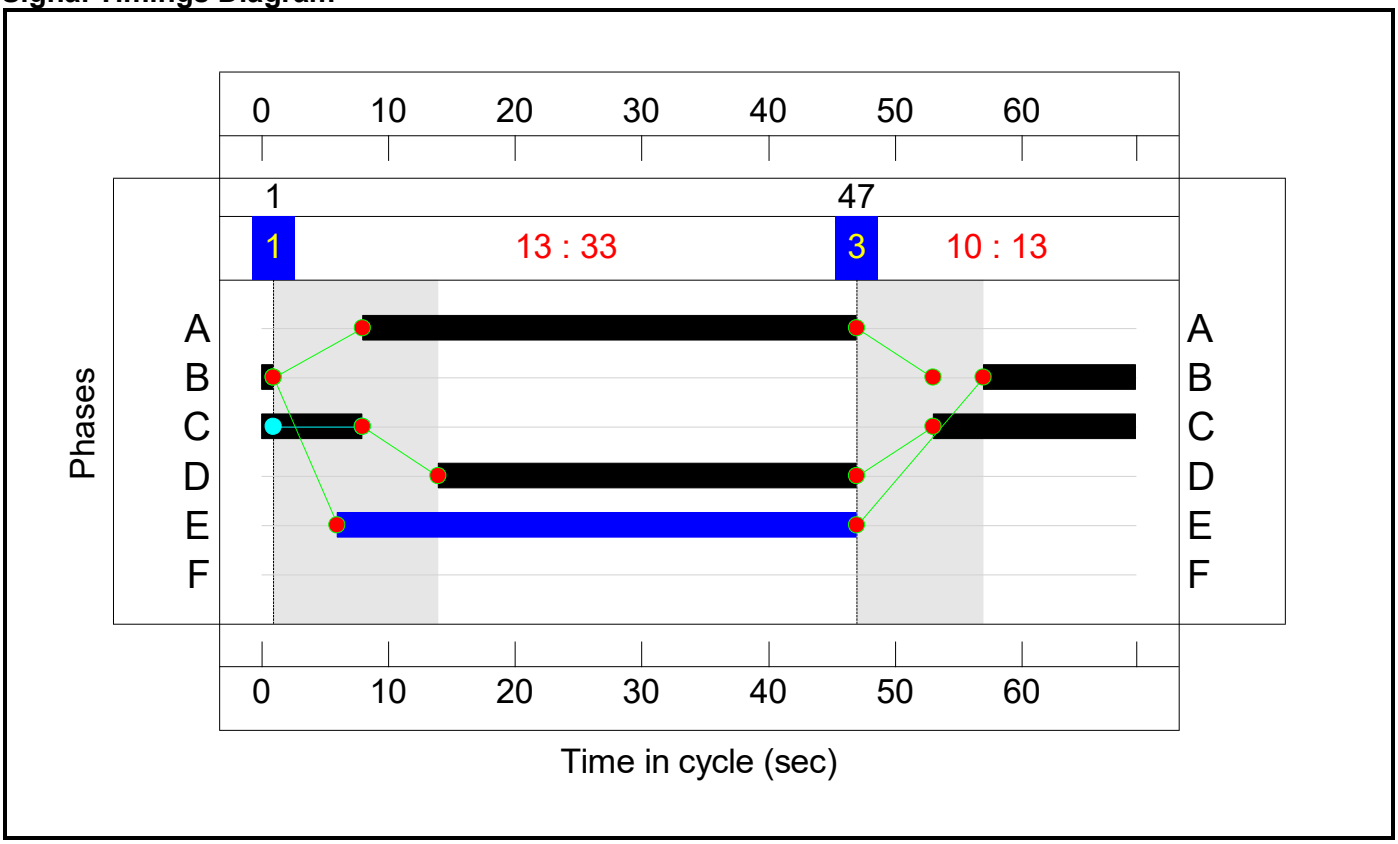


Stage Timings

Stage	1	3
Duration	33	13
Change Point	1	47

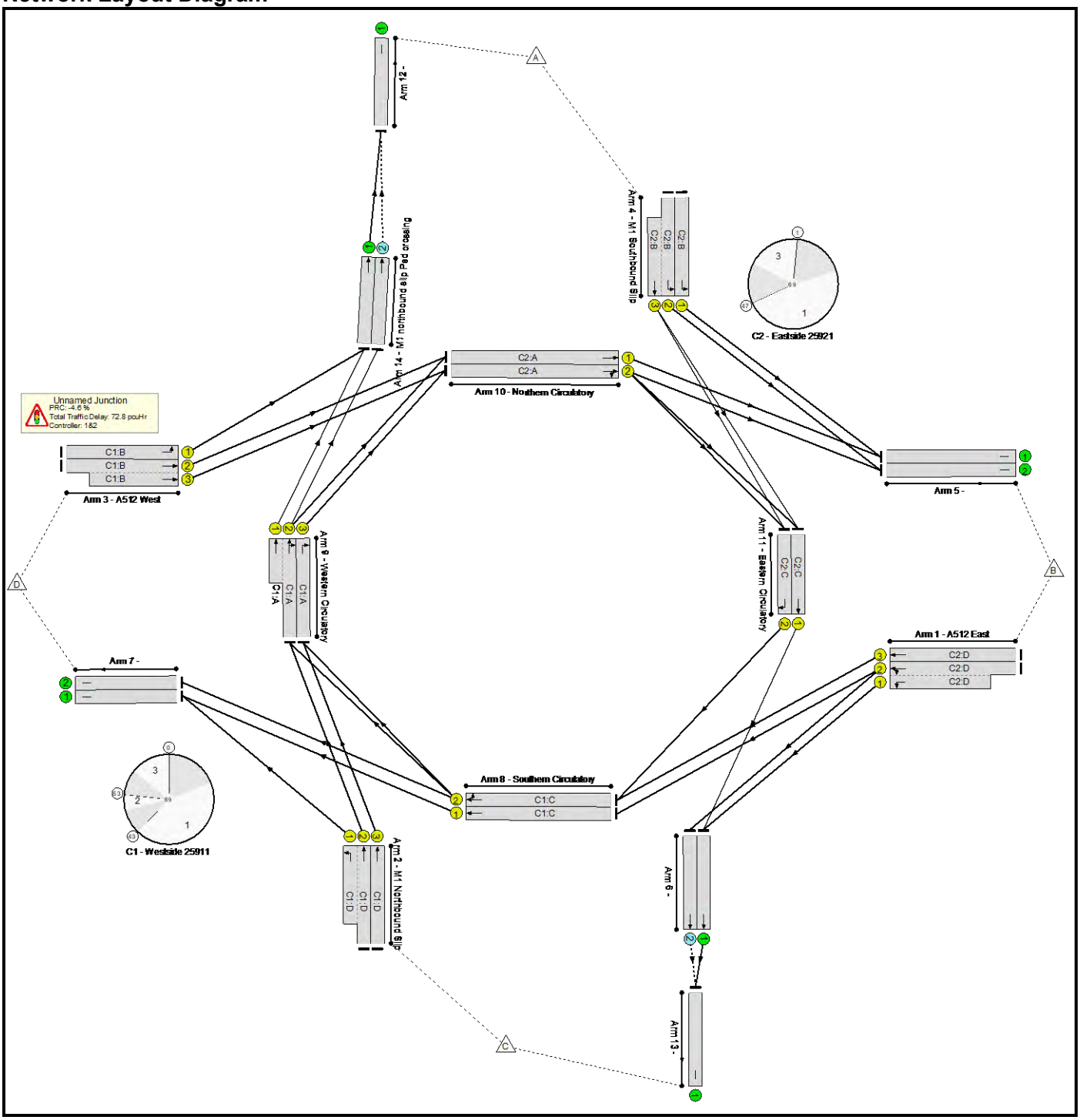
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.1%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	33	-	1302	1949:1963	906+541	90.0 : 90.0%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	33	-	773	1955	963	80.2%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	372	1973:1963	93+313	91.7 : 91.7%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	284	1979	315	90.0%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	450	1926	865	52.0%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	1283	1937:1941	716+647	94.1 : 94.1%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	13	-	269	1937	393	68.4%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	13	-	656	1945:1948	395+395	90.0 : 76.2%
5/1		U	N/A	N/A	-		-	-	-	1028	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	992	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	743	1980	1980	37.5%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	551	0.0%
7/1		U	N/A	N/A	-		-	-	-	1102	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	420	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	815	1961	1336	61.0%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	1074	1939	1321	81.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	739	1926:1941	158+719	84.3 : 84.3%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	284	1932	784	36.2%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	39	-	759	1953	1132	67.0%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	39	-	893	1937	1123	79.5%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	24	-	256	1997	724	35.4%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	24	-	301	1994	722	41.7%
12/1		U	N/A	N/A	-		-	-	-	1104	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	743	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	1056	1940	1940	54.4%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	48	1940	483	9.9%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**48**	**0**	**0**	**37.4**	**35.4**	**0.0**	**72.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**48**	**0**	**0**	**37.4**	**35.4**	**0.0**	**72.8**	**-**	**-**	**-**	**-**
1/2+1/1	1302	1302	-	-	-	5.1	4.2	-	9.3	25.7	13.6	4.2	17.8
1/3	773	773	-	-	-	3.2	2.0	-	5.1	23.9	12.2	2.0	14.2
2/2+2/1	372	372	-	-	-	2.9	4.4	-	7.3	70.3	5.3	4.4	9.7
2/3	284	284	-	-	-	2.2	3.7	-	5.9	74.8	5.3	3.7	8.9
3/1	450	450	-	-	-	1.7	0.5	-	2.2	18.0	6.1	0.5	6.7
3/2+3/3	1283	1283	-	-	-	5.6	6.9	-	12.5	35.0	12.2	6.9	19.0
4/1	269	269	-	-	-	1.9	1.1	-	3.0	39.7	4.7	1.1	5.8
4/2+4/3	656	656	-	-	-	4.8	2.4	-	7.2	39.4	6.6	2.4	9.0
5/1	1028	1028	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	992	992	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	743	743	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1102	1102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	420	420	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	815	815	-	-	-	1.2	0.8	-	1.9	8.6	4.2	0.8	5.0
8/2	1074	1074	-	-	-	1.1	2.1	-	3.2	10.8	7.0	2.1	9.2
9/2+9/1	739	739	-	-	-	3.1	2.6	-	5.7	27.7	13.6	2.6	16.2
9/3	284	284	-	-	-	0.3	0.3	-	0.6	7.3	0.5	0.3	0.8
10/1	759	759	-	-	-	1.6	1.0	-	2.6	12.4	4.4	1.0	5.4
10/2	893	893	-	-	-	1.4	1.9	-	3.3	13.4	6.0	1.9	7.9
11/1	256	256	-	-	-	1.2	0.3	-	1.5	21.4	4.9	0.3	5.1
11/2	301	301	-	-	-	0.2	0.4	-	0.5	6.1	0.3	0.4	0.6
12/1	1104	1104	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	743	743	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	1056	1056	-	-	-	0.0	0.6	-	0.6	2.0	1.1	0.6	1.7
14/2	48	48	48	0	0	0.0	0.1	-	0.1	4.1	0.0	0.1	0.1

C1 - Westside 25911	PRC for Signalled Lanes (%):	-4.6	Total Delay for Signalled Lanes (pcuHr):	39.30	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	0.0	Total Delay for Signalled Lanes (pcuHr):	32.55	Cycle Time (s):	69
	PRC Over All Lanes (%):	-4.6	Total Delay Over All Lanes(pcuHr):	72.81		